Curriculum Vitae

For

WAI KEUNG LI Ph. D.

Department of Statistics & Actuarial Science
University of Hong Kong
Hong Kong

July, 2015

Position: Chair Professor since 2000 (joined HKU since 1983)
Department of Statistics & Actuarial Science,
University of Hong Kong, Hong Kong.

Mailing Address: Department of Statistics & Actuarial Science,
University of Hong Kong,
Hong Kong.

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Degrees: B.Sc. (First class with Distinction) in Mathematics,
York University, Canada (1975).
M.A. in Mathematics, York University, Canada (1976).
Ph.D. in Statistics, University of Western Ontario (1981).

Honours and Achievements:

(1) **Outstanding Research Supervisor Award**, *University of Hong Kong* (1999-2000)
(2) **Outstanding Researcher Award**, *University of Hong Kong* (2001-2002)
(3) **Croucher Foundation Senior Research Fellow**, *Croucher Foundation* (2003-2004)
(4) **Elected Member**, *International Statistical Institute* (1991)
(5) Elected **Fellow**, *American Statistical Association* (2003)
(6) Elected **Fellow**, *Institute of Mathematical Statistics* (2006)
(7) Honorary Member, *Hong Kong Statistical Society*, conferred March, 2009
(8) **Long Service Award** for over 25 years of service, *University of Hong Kong*, conferred June, 2009
(9) **Outstanding Service Award**, *International Chinese Statistical Association*, conferred August, 2009
(10) HKU Scholars **as ranked in the world's top 1%** for **4 successive years** 2009-2011 by Thomson Reuters according to Essential Science Indicators
(11) I was **greatly honoured** by the conference: *Frontiers of Time Series Analysis and Related Fields: An International Conference in Honour of Professor W.K. Li*, July 26-27, 2013, HKUST. **Three** current/retired academicians of **Academy Sinica** attended the event. (See attached photo of former academician Prof George Tiao) http://www.saasweb.hku.hk/conference/wkli60/
(12) A **special issue** of the *Journal of Econometrics* with the same title of the above meeting: *Frontiers of Time Series Analysis and Related Fields* will be published in 2015/2016.

I have published/accepted 139 refereed journal articles, **27** of these appeared in the **top 4** journals of Statistics, **3** in the **top 3** journals of Actuarial Science. I also published a single authored monograph under Chapman & Hall. All reviews by top statistical journals are favourable. (Top 4 in Stat: *Annals of Stat.; J. Royal Statist. Soc. B; J. Amer. Statist. Assoc.; Biometrika*. Top 3 in Actuarial Sci: *Insurance: math & econ.;Astin Bulletin; Scand. Actuarial Journal*.)

The **following papers** of mine have been listed as **HKU's most cited** in **Scopus** under the categories of Mathematics and Economics & Finance.

(1) On mixture autoregressive models. (2000, *J. Roy. Statist. Soc. B*)
(2) Recent theoretical results for time series models with GARCH errors. (2002 *J. Econ. Survey*)
(3) On fractionally integrated autoregressive moving-average time series models with conditional heteroscedastcity. (1997, *J. Amer. Statist. Assoc*.)
(4) On a double threshold autoregressive heteroscedastic time series model. (1996, *J. Appl. Econometrics*)

Total citations in the Web of Science **= 2433** as on 30-04-2014.
h-index = 25 by Web of Science; **h-index = 34** by Google (verified)

Departmental achievements during my recent headship:

(1) The **QS** world ranking by subject for **HKU Statistics** rose from 26th in 2011 to **22nd** in 2015.

(2) HKU is ranked **No. 1 in Asia and No. 10 worldwide** in a publication of the official journal of the Society of Actuaries, *North American Actuarial Journal (*2013 Vol. 17, 3-12), in terms of publication pages in the actuarial journals included in the study over a 30-year period from 1982 to 2011.

(3) The Department of Statistics and Actuarial Science was designated as a **Center of Actuarial Excellence** by the Society of Actuaries on 15 December 2011. The designation is awarded for a period of five years to schools which demonstrate excellence in actuarial science through meeting strict criteria in quality of curriculum, number and quality of graduates, qualified faculty, strong ties to business, and beneficial research and scholarship.

Professional Membership:

Member, American Statistical Association
Life Member, International Chinese Statistical Association
Life Member, Hong Kong Statistical Society
Fellow, Royal Statistical Society (by election)
Member, Bernoulli Society for Mathematical Statistics and Probability
Member, Institute of Mathematical Statistics

Employment Experience:

Chair Professor, Department of Statistics & Actuarial Science, University of Hong Kong, Hong Kong, July 2000 - present.

Head, Department of Statistics and Actuarial Science, University of Hong Kong, Hong Kong, 1st January 1997 – 31st December, 1999,1st January 2006 – 31st December, 2008; 1st September, 2011-present.

Associate Dean, Faculty of Social Science, 10 January 2002 – March 16, 2003.

Acting Head, Department of Statistics, University of Hong Kong, Hong Kong, 1st September 1996 - 31st December, 1996.

Professor (Reader), Department of Statistics & Actuarial Science, University of Hong Kong, Hong Kong, July 1995 - June 2000.

Senior Lecturer, Department of Statistics, University of Hong Kong, Hong Kong, 1st January, 1991 - June, 1995.

Lecturer, Department of Statistics, University of Hong Kong, Hong Kong, September 1983 - December 1990, (tenured since 1985).

Lecturer, Department of Economics and Statistics, National University of Singapore, Republic of Singapore, September 1981 - August 1983.

Research Interests

Time Series Analysis
Econometrics
Financial and Risk Management Applications
Environmetrics
Stochastic Processes with applications to Hydrology and Climatology
Sampling Theory

Refereed Journal Papers:
(Citations from ISI Web of Knowledge as on 13-11-2009 in square brackets)

(1) Ryan H L IP and WAI KEUNG LI (2015) Time Varying Spatio-Temporal Covariance Models. *Spatial Statistics*, accepted.

(2) GUODONG LI, BO GUAN, WAI KEUNG LI and PHILIP L. H. YU (2015) Hysteretic Autoregressive Time Series Models. *Biometrika*, accepted.

(3) KE ZHU and WAI KEUNG LI (2015) A New Pearson-Type QMLE for Conditionally Heteroskedastic Models. *Journal of Business and Economic Statistics*, to appear.

(4) KE ZHU and WAI KEUNG LI (2015) A Bootstrapped Spectral Test for Adequacy in Weak ARMA Models. To appear in *Journal of Econometrics*.

(5) KARL Y. K. WU and WAI KEUNG LI (2015) Double Generalized Threshold Models with Constraint on the Dispersion by the Mean. *Computational Statistics and Data Analysis*, to appear.

(6) MUYI LI, WAI KEUNG LI and GUODONG LI (2015) A New Hyperbolic GARCH Model. *Journal of Econometrics*, accepted.

(7) TONY SIU TUNG WONG and WAI KEUNG LI (2015) Extreme Values Identification in Regression Using a Peaks-Over-Threshold Approach. *Journal of Applied Statistics*, **42,** 566-576.

(8) CHAO WANG, HENG LIU, JIAN FENG YAO, RICHARD. A. DAVIS and WAI KEUNG LI (2014) Self-Excited Threshold Poisson Autoregression. *Journal of the American Statistical Association*, **109**, 777-787.

(9) KE ZHU, PHILIP L. H. YU and WAI KEUNG LI (2014) Testing for the Buffered Autoregressive Processes. *Statistica Sinica*, **24**, 971-984. [1]

(10) HWA KYUNG LIM, WAI KEUNG LI and PHILIP L.H. YU (2014) Zero-Inflated Poisson Regression Mixture Model. *Computational Statistics and Data Analysis,* **71**, 151-158. [1]

(11) TONY S. T. WONG AND WAI KEUNG LI (2014) Test for Homogeneity in Gamma Mixture Models Using Likelihood Ratio. *Computational Statistics and Data Analysis,* **70**, 127-137.

(12) PHILIP L. H. YU, W. K. LI and F. C. NG (2014) Formulating Hypothetical Scenarios in Correlation Stress Testing via a Bayesian Framework, *North American Journal of Economics and Finance*, **27**, 17-33.

(13) F. C. NG, WAI KEUNG LI and PHILIP YU (2013) A Black-Litterman Approach to Correlation Stress testing. *Quantitative Finance*, **14**, 1643-1649.http://dx.doi.org/10.1080/14697688.2013.843022

(14) MUYI LI, WAI KEUNG LI and GUODONG LI (2013) On Mixture Memory Models. *Journal of Time Series Analysis*, **34**, 606-624. (Lead article of the issue)

(15) RYAN H. L. IP, W. K, LI and KENNETH M. Y. LEUNG (2013) Seemingly Unrelated Intervention Time Series Models for Effectiveness Evaluation of Large Scale Environmental Remediation. *Marine Pollution Bulletin*, **74**, 56-65.

(16) GILBERT LUI, W. K. LI, ANDERS BJORGESAETER and KENNY LEUNG (2013) Deriving Field- Based Sediment Quality Guidelines from the Relationship between Species Density and Contaminant Level Using a Novel Nonparametric Bayesian Approach, *Environmental Science and Pollution Research*, **21**, 177-192.

(17) DONG LI, SHIQING LING and W. K. LI (2013) Asymptotic Theory on the Least Squares Estimation of Threshold Moving-Average Models. *Econometric Theory*, **29**, 482-516. [4]

(18) PENGCHENG XU, A. W. JAYAWARDENA and W. K. LI (2013) Model Selection for RBF Network via Generalized Degree of freedom, *Neurocomputing* **99**, 163-171. [1]

(19) DAVID LEE, W. K. LI and TONY S. T. WONG (2012) Modeling Insurance Claims via a Mixture Exponential Model Combined with Peaks-Over-Threshold Approach, *Insurance : Mathematics and Economics* **51**, 538-550. [2]

(20) WILSON KWAN, W K LI and GUODONG LI (2012) On the Estimation and Diagnostics Checking of the ARFIMA-HYGARCH Model, *Computational Statistics and Data Analysis*, **56**, 3632-3644. [3]

(21) PENGCHENG XU, W. K. LI, and A. W. JAYAWARDENA (2012) Noise Level Estimation for a Chaotic Time Series, *International Journal of Bifurcation and Chaos* **22**, 1250052 [18 pages] [1]

(22) MUYI LI, GUODONG LI and W. K. LI (2011) Score Tests for Hyperbolic GARCH Models. *Journal of Business and Economic Statistics*, **29**, 579-586. [1]

(23) CHAO WANG and W. K. LI （2011）On the Autopersistence Functions and the Autopersistence Graphs of Binary Autoregressive Time Series. Journal of Time Series Analysis, 32, 639-646. [4]

(24) WILSON KWAN, W. K. LI and GUODONG LI (2011) On the Threshold Hyperbolic GARCH Models. *Statistics and Its Interface*, **4**, 159-166.

(25) DONG LI, W. K. LI and SHIQING LING (2011) On the Least Squares Estimation of Threshold Autoregressive and Moving-Average Models. *Statistics and Its Interface*, **4,** 183-196.

(26) D. S. K. KARUNASINGHA, A. W. JAYAWARDENA and W. K. LI (2011) Evolutionary Product Unit Based Neural Networks for Hydrological Time Series Analysis, *Journal of Hydroinformatics*, **13**, 825-841.

(27) X. CHENG, W. K. LI, P. L. H. YU, X. ZHOU, C. WANG and P. H. LO (2011) Modeling Threshold Conditional Heteroscedasticity with Regime-Dependent Skewness and Kurtosis. *Computational Statistics and Data Analysis*, **55**, 2590-2604. [2]

(28) J. FRANKE, J. P. STOCKIS, J. TAJUIDJE-KAMGAING and W. K. LI (2011) Mixtures of Nonparametric Autoregressions, *Journal of Nonparametric Statistics*, **23**, 287-303. [4]

(29) G. LI and W. K. LI (2011) Testing for Linear Time Series Models against Its Threshold Extension. *Biometrika*, **98,** 243-250. [4]

(30) X. CHENG, P. L. H. YU and W. K. LI (2011) Basket Trading under Co-Integration with the Logistic Mixture Autoregressive Model. *Quantitative Finance*, **11**, 1407-1419.

(31) W. JAYAWARDENA, P. XU, and W.K. LI (2010) Modified Correlational Entropy Estimation for a Noisy Chaotic Time Series. *Chaos*, **20**, 023104, doi:10.1063/1.3382013(11pages). Top 20 most downloaded article in *Chaos*, June 2010. (http://chaos.aip.org/features/most_downloaded?month=6&year=2010) [3]

(32) P. L. H. YU, W. K. LI and S. JIN (2010) On Some Models for Value at Risk. *Econometric Reviews* , **29**, 622-641.[4]

(33) T. S. T. WONG and W. K. LI (2010) A Threshold Approach for Peak-Over-Threshold Modeling with Maximum Product of Spacings. *Statistica Sinica*, **20**, 1257-1272. [3]

(34) C. K. KWAN, W. K. LI and K. NG (2010) A Multivariate Threshold GARCH Model with Time Varying Correlations. *Econometric Reviews*, **29**, 20-38. [4]

(35) W. K. CHING, K. T. K SIU, L, LI, H. JIANG, T LI and W. K. LI (2009) An Improved Parsimonious Multivariate Markov Chain Model for Credit Risk, *Journal of Credit Risk*, **5**, 1-25. [1]

(36) W. K. CHING, K. T. K. SIU, L. LI, T.LI and W. K. LI (2009) Modelling Default Data via an Interactive Hidden Markov Model. *Computational Economics*, **34,** 1-9. [2]

(37) A.W. JAYAWARDENA, P. XU, and W.K. LI (2009) Rainfall Data Simulation by Hidden Markov Model and Discrete Wavelet Transformation. *Stochastic Environmental Research and Risk Assessment*, **23**, 863-77. [5]

(38) G. LI and W. K. LI (2009) Least Absolute Deviation Estimation for Unit Root Processes with GARCH Errors. *Econometric Theory*, **25**, 1208-1227. [3]

(39) S.S.M. KWOK, W.K. LI and P.L.H. YU (2009) The Autoregressive Duration Marked Duration Model: Statistical Inference to Market Microstructure. *Journal of Data Science,* **7,** 189-201.

(40) X. CHENG, P.L.H. YU and W.K. LI (2009) On a Dynamic Mixture GARCH Model, *Journal of Forecasting*, **28**, 247-265. [5]

(41) H.C. WU, P.L.H. YU and W.K. LI (2009) A Smoothed Bootstrap Test for Independence Based on Mutual Information. *Computational Statistics and Data Analysis*, **53**, 2524-2536. [3]

(42) S.S.M. KWOK and W.K. LI (2009) A Note on Diagnostic Checking of the Double Autoregressive Model. *Journal of Statistical Computation and Simulation*, **79**, 705-715.

(43) S. S. M. Kwok and W. K.LI (2008) On Diagnostic Checking of the Autoregressive Conditional Intensity Model, *The Canadian Journal of Statistics*, **36**, 561-576,

(44) G. LI and W.K. LI (2008) Least Absolute Deviation Estimation for Fractionally Integrated Autoregressive Moving Average Time Series Model with Conditional Heteroscedasticity. *Biometrika*, **95**, 399-414. [10]

(45) G. LI and W.K. LI (2008) Testing for Threshold Moving Average with Conditional Heteroscedasticity. *Statistica Sinica*, **18**, 647-665. [9]

(46) A.W. JAYAWARDENA, P. XU and W.K. LI (2008) A Method of Estimating the Noise Level in a Chaotic Time Series. *Chaos*, **18,** 023115(11pages). [12]

(47) P.W. FONG, W.K. LI, C.W. YAU and C.S. WONG (2007) On a Mixture Vector Autoregressive Model. *The Canadian Journal of Statistics*, **35**, 135-150. [14]

(48) B. SIVAKUMAR, A.W. JAYAWARDENA and W.K. LI (2007) Hydrologic Complexity and Classification: A Simple Data Reconstruction Approach. *Hydrological Processes*, **21**, 2713-2728. [14]

(49) Y. XIA, W.K. LI and H. TONG (2007) Threshold Variable Selection Using Nonparametric Methods. *Statistica Sinica*, **17**, 265-287. [4]

(50) Z. ZHANG, K.C. YUEN and W.K. LI (2007) A Time-Series Risk Model with Constant Interest for Dependent Classes of Business. *Insurance: Mathematics and Economics*, **41**, 32-40. [3]

(51) W.K. CHING, K.T.K. SIU, S.L. FUNG, K.P. NG and W.K. LI (2007) Interactive Hidden Markov Models and Their Applications. *IMA Journal of Management Mathematics*, **18**, 85-97. [4]

(52) K.C. YUEN, G. WANG and W.K. LI (2007) The Gerber-Shiu Expected Discounted Penalty Function for Risk Processes with Interest and a Constant Dividend Barrier. *Insurance: Mathematics and Economics*, **40**, 104-112. [25]

(53) G.C.S. LUI, W.K. LI, K.M.Y. LEUNG, J.H.W. LEE, A.W. JAYAWARDENA (2007) Modelling Algal Blooms Using Vector Autoregressive Model with Exogenous Variables and Long Memory Filter. *Ecological Modellin*g, **200**, 130-138. [8]

(54) S. JIN and W.K. LI (2006) Modelling Panel Time Series with Mixture Autoregressive Model. *Journal of Data Science*, **4**, 425-446.

(55) P.W. FONG, W.K. LI and H.Z. AN (2006) A Simple Multivariate ARCH Model Specified by Random Coefficients. *Computational Statistics and Data Analysis,* **51**, 1779-1802. [6]

(56) S. JIN and W.K. LI (2006) Modelling Contemporaneously Correlated Panel Data with Partial Linear Regression. *International Journal of Statistics and Systems*, **2**, 133-153.

(57) E.H.C. WU, P.L.H. YU and W.K. LI (2006) Value at Risk Estimation Using Independent Component Analysis-Generalized Autoregressive Conditional Heteroscedasticity (ICA-GARCH) Models. *International Journal of Neural Systems,* **16(5)**, 371-382. [2]

(58) L.M. WAN, K.C. YUEN and W.K. LI (2006) Analysis of an Insurance Model with Thinning Dependence and Common Shock. *Journal of Actuarial Practice,* **13**, 147-164.

(59) A.W. JAYAWARDENA, P.C. XU, F.L. TSANG and W.K. LI (2006) A New Method for Determining the Structure of a Radial Basis Function Network for Prediction of Non-Linear Hydrological Time Series. *Hydrological Sciences Journal*, **51,** 21-44. [18]

(60) Z. ZHANG, W.K. LI and K.C. YUEN (2006) On a Mixture GARCH Time Series Model. *Journal of Time Series Analysis*, **27**, 577-597. [14]

(61) K.M.Y. LEUNG, A. BJORGESAETER, J.S. GRAY, W.K. LI, G.C.S. LUI, Y. WANG and P.K.S. LAM (2005) Deriving Sediment Quality Guidelines from Field-Based Species Sensitivity Distributions. *Environmental Science and Technology*, **39**, 5148-5156. [42]

(62) W.K. LI, P.L.H. YU and K.S.M. TSE (2005) A Vulnerability Index for Predicting Extreme Market Events in Hong Kong. *International Journal of Applied Economics*, **2**, 1-31.

(63) G. LI and W.K. LI (2005) Diagnostic Checking Time Series Model with Conditional Heteroscedasticity Estimated by the Least Absolute Deviation Approach. *Biometrika*, **92**, 691-701. [10]

(64) L.M. WAN, K.C. YUEN and W.K. LI (2005) Ultimate Ruin Probability for a Time-Series Risk Model with Dependent Class of Insurance Business. *Journal of Actuarial Practice*, **12**, 193-214.

(65) H. WONG, W.K. LI and S. LING (2005) Joint Modelling of Cointegration and Conditional Heteroscedasticity with Applications. *Annals of the Institute of Statistical Mathematics*, **57**, 83-103. [2]

(66) T.P.W. FONG and W.K. LI (2004) Some Results on Co-integration with Random Coefficients in the Error Correction Form: estimation and testing. *Journal of Time Series Analysis*, **25**, 419-441. [2]

(67) Y. XIA, W.K. LI, H. TONG and D. ZHANG (2004) A Goodness-of-fit Test for Single-Index Models (with discussion). *Statistica Sinica*, **14**, 1-39. [24]

(68) S. LING and W.K. LI (2003) Asymptotic Inference for Unit Root Processes with GARCH(1,1) Errors. *Econometric Theory*, **19**, 541-564. [25]

(69) W.K. LI and Philip L.H. YU (2003) On the Residual Autocorrelation of the Autoregressive Conditional Duration Model. *Economics Letters*, **79**, 169-175. [9]

(70) P.W. FONG and W.K. LI (2003) On Time Series with Randomized Unit Root and Randomized Seasonal Unit Root. *Computational Statistics and Data Analysis*, **43**, 369-395. [4]

(71) S. LING, W.K. LI and M. MCALEER (2003) Estimation and Testing for Unit Root Process with GARCH(1,1) Errors: Theory and Monte Carlo Evidence. *Econometric Reviews*, **22**, 179-202. [31]

(72) B. FU, W.K. LI, T.W.K. FUNG (2002) Testing Model Adequacy for Dynamic Panel Data with Inter-correlation. *Biometrika*, **89**, 591-601. [4]

(73) H.Z. AN, P.W. FONG and W.K. LI (2002) An Approach of Modelling Subset Multivariate ARCH Model via the AIC Principle. *Science in China, Series A*, **45**,

1089-1099.

(74) M.K.P. SO, W.K. LI and K. LAM (2002) A Threshold Volatility Model. *Journal of Forecasting*, **21**, 473-500. [36]

(75) Y. XIA and W.K. LI (2002) Asymptotic Behaviour of Bandwidth Selected by the Cross-validation Method for Local Polynomial Smoothing. *Journal of Multivariate Analysis*, **83**, 265-287. [15]

(76) W.K. LI, S. LING and M. MCALEER (2002) A Survey of Recent Theoretical Results for Time Series Models with GARCH Errors. *Journal of Economic Surveys*, **16**, 245-269. [122]

(77) Y. XIA, H. TONG and W.K. LI (2002) Single-Index Diffusion Models and Their Estimation. *Statistica Sinica*, **12**, 785-799. [13]

(78) H. WONG and W.K. LI (2002) Detecting and Diagnostic Checking Multivariate Conditional Heteroscedastic Time Series Models. *Annals of the Institute of Statistical Mathematics*, **54**, 45-59. [7]

(79) Y. XIA, H. TONG, W.K. LI and L. ZHU (2002) An Adaptive Estimation of Dimension Reduction Space. *Journal of the Royal Statistical Society, B*, **64**, 363-410, as a discussion paper. (Read on 13/2/2002 for the Royal Statistical Society.) [207]

(80) A.W. JAYAWARDENA, W.K. LI and P. XU (2002) Model Selection for Prediction of Hydrological Time Series. *Journal of Hydrology*, **258**, 40-57. [46]

(81) W.K. LI, S. LING and H. WONG (2001) Estimation for Partially Nonstationary Multivariate Autoregressive Models with Conditional Heteroscedasticity. *Biometrika*, **88**, 1135-1152. [12]

(82) A.C.S. WONG and W.K. LI (2001) On a Logistic Mixture Autoregressive Model. *Biometrika,* **88**, 833-846. [35]

(83) A.C.S. WONG and W.K. LI (2001) On a Mixture of Autoregressive Conditional Heteroscedastic Model. *Journal of the American Statistical Association,* **96**, 982-995. [68]

(84) A.Y.C. KUK, T.K. MAK and W.K. LI (2001) Estimation Procedures for Categorical Survey Data with Non-igorable Non-response. *Communications in Statistics: Theory and Methods,* **30**, 643-663. [3]

(85) S. LING and W.K. LI (2001) Asymptotic Inference for Nonstationary Fractionally Integrated Auto-regressive Moving-Average Models. *Econometric Theory,* **17**, 738-764. [5]

(86) Y. XIA, H. TONG, W.K. LI and L. ZHU (2000) On the Estimation of an Instantaneous Transformation for Time Series. *Journal of the Royal Statistical Society, B*, **62**, 383-397.

(87) C.S. WONG and W.K. LI (2000) Testing for Double Threshold Autoregressive Conditional Heteroscedastic Model. *Statistica Sinica*, **10**, 173-189. [12]

(88) C.S. WONG and W.K. LI (2000) On a Mixture Autoregressive Model. *Journal of the Royal Statistical Society, B*, **62**, 95-115. [97]

(89) Y. XIA, H. TONG and W.K. LI (1999) On Extended Partially Linear Single-Index Models. *Biometrika*, **86**, 831-842. [49]

(90) Y. XIA and W.K. LI (1999) On Single-Index Coefficient Regression Models. *Journal of the American Statistical Association*, **94**, 1275-1285. [53]

(91) Y. XIA and W.K. LI (1999) On the Estimation and Testing of Functional-Coefficient Linear Models. *Statistica Sinica*, **9**, 735-757. [61]

(92) M.K.P. SO and W.K. LI (1999) Bayesian Unit Root Testing in Autoregressive Random Variance Model. *Journal of Business and Economic Statistics*, **17**, 491-496. [4]

(93) M.K.P. SO, K. LAM and W.K. LI (1999) Forecasting Exchange Rate Volatility Using Autoregressive Random Variance Model. *Applied Financial Economics*, **9**, 583-591. [10]

(94) S. LING and W.K. LI (1998) Limiting Distribution of Maximum Likelihood Estimators for Unstable ARMA Time Series with GARCH errors. *Annals of Statistics,* **26**, 84-125. [53]

(95) M.K.P. SO, K. LAM and W.K. LI (1998) Stochastic Volatility Model with Markov Switching. *Journal of Business and Economic Statistics*, **16**, 244-253. [48]

(96) C.S. WONG and W.K. LI (1998) A Note on the Corrected Akaike Information Criterion for the Threshold Autoregressive Models. *Journal of Time Series Analysis,* **19**, 113-124. [20]

(97) T.M. NG and W.K. LI (1997) F-Tests for Seasonal Differencing with a Break-Point. *Journal of Statistical Planning and Inference,* **65**, 87-107.

(98) S. LING and W.K. LI (1997) On Fractionally Integrated Autoregressive Moving-Average Time Series Models with Conditional Heteroscedasticity. *Journal of the American Statistical Association*, **92**, 1184-1194. [108]

(99) C.S. WONG and W.K. LI (1997) Testing for Threshold Autoregression with Conditional Heteroscedasticity. *Biometrika*, **84,** 407-418. [24]

(100) W.K. PANG and W.K. LI (1997) A Canonical Partial Autocorrelation for Measuring Dependence in Directional Time Series. [應用概率統計] *Applied Probability & Statistics*, **13**, 92-102.

(101) H. WONG and W.K. LI (1997) On a Multivariate Conditional Heteroscedastic Model. *Biometrika*, **84**, 111-123. [41]

(102) M.K.P. SO, W.K. LI and K. LAM (1997) Multivariate Modelling of the Autoregressive Random Variance Process. *Journal of Time Series Analysis,* **18,** 429-446. [8]

(103) S. LING and W.K. LI (1997) Diagnostic Checking Nonlinear Multivariate Time Series with Multivariate ARCH Errors. *Journal of Time Series Analysis*, **18**, 447-464. [26]

(104) J. LIU, W.K. LI and C.W. LI (1997) On a Threshold Auto-regression with Conditional Heteroscedastic Variances. *Journal of Statistical Planning and Inferences*, **62**, 279-300. [32]

(105) M.K.P. SO, K. LAM and W.K. LI (1997) An Empirical Study of Volatility in Seven Southeast Asian Stock Markets using ARV Models. *Journal of Business Finance and Accounting*, **24,** 261-275. [10]

(106) T.K. MAK, H. WONG and W.K. LI (1997) Estimation of Nonlinear Time Series with Conditional Heteroscedastic Variances by Iteratively Weighted Least Squares. *Computational Statistics and Data Analysis*, **24,** 169-178. [12]

(107) H. WONG and W.K. LI (1996) Distribution of the Cross-Correlations of Squared-Residuals in ARMA Models. *The Canadian Journal of Statistics*, **24**, 489-502. [3]

(108) T.M. NG and W.K. LI (1996) Tests for Seasonal Differencing with an Unknown Break-Point. *The Australian Journal of Statistics*, **38**, 131-153.

(109) A.H. LEE, W.K. LI and Y.V. HUI (1996) On the Empirical Influence Function of the Portmanteau Statistic in AR(1) Process. *Journal of Japan Statistical Society*, **26**, 83-90.

(110) C.W. LI and W.K. LI (1996) On a Double Threshold Autoregressive Heteroscedastic Time Series Model. *Journal of Applied Econometrics*, **11**, 253-274. [111]

(111) W.K. LI and K. LAM (1995) Modelling Asymmetry in Stock Returns by a Threshold Autoregressive Conditional Heteroscedastic Model. *Journal of Royal Statistical Society (The Statistician)**D***, **44**, 333-341. [37]

(112) Y.V. HUI and W.K. LI (1995) On Fractionally Differenced Periodic Processes. *Sankhya **B***, **57**, 19-31. [2]

(113) H. WONG and W.K. LI (1995) A Portmanteau Test for Conditional Heteroskedasticity Using Ranks of Squared-Residuals. *Journal of Applied Statistics*, **22**, 121-134. [3] (adopted by the statistical software SAS in its AUTOREG Procedure in 2010)

(114) W.K. LI and T.K. Mak (1994) On the Squared Residual Autocorrelations in Non-Linear Time Series with Conditional Heteroskedasticity. *Journal of Time Series Analysis*, **15**, 627-636. [85]

(115) W.K. LI (1994) Time Series Based on Generalized Linear Models: some further results. *Biometrics*, **50**, 506-511. [36]

(116) W.K. LI (1994) Parameter Inference for Time Series with Regular and Seasonal Unit Roots. *Communications in Statistics: Theory and Methods*, **23**, 721-733.

(117) W.K. LI and Y.V. HUI (1994) A Robust Residual Cross Correlation Test for Time Series Independence. *Journal of Statistical Computation and Simulation*, **49**, 103-109. [5]

(118) W.K. LI (1993). A Simple One Degree of Freedom Test for Non-Linear Time Series Model Discrimination. *Statistica Sinica*, **3**, 245-254. [5]

(119) M.K.P. SO, K. LAM, W.K. LI (1993) In Search of CHAOS in Some Hong Kong Stocks Prices. *Securities Industry Review*, **19**, 79-95.

(120) W.K. LI (1992). On the Asymptotic Standard Errors of Residual Autocorrelations in Nonlinear Time Series Modelling. *Biometrika*, **79**, 435-437. [25]

(121) W.K. LI (1991) Some Lagrange Multiplier Test for Seasonal Differencing. *Biometrika*, **78**, 381-387. [8]

(122) W.K. LI (1991) Testing Model Adequacy for Some Markov Regression Models for Time Series. *Biometrika*, **78**, 83-89. [13]

(123) K. LAM, W.K. LI and P.S. WONG (1990) Price Changes and Trading Volume Relationship in the Hong Kong Securities Market. *Asia-Pacific Journal of Management*, **7**, S25-42. [2]

(124) W.K. LI and M.C.O. KWOK (1990). Some Results on the Estimation of a Higher Order Markov Chain. *Communications in Statistics B*, **19**, 363-380. [4]

(125) C.L. LO and W.K. LI (1990). Two New Approaches to Robust Estimation in Time Series. *Journal of Statistical Computation and Simulation*, **34**, 209-255.

(126) W.K. LI and Y.V. HUI (1989). Robust Multiple Time Series Modelling. *Biometrika*, **76**, 309-315. [7]

(127) W.K. LI and Y.V. HUI (1988). An Algorithm for the Exact Likelihood of Periodic Autoregressive Moving Average Models. *Communications in Statistics B*, **17**, 1483-1494. [10]

(128) W.K. LI (1988) A Goodness of Fit Test in Robust Time Series Modelling. *Biometrika*, **75**, 355-361. [13]

(129) T.K. MAK and W.K. LI (1988) A New Method for Estimating Subgroup Means under Misclassification. *Biometrika*, **75**, 105-111. [5]

(130) W.K. LI and A.I. McLEOD (1988) ARMA Modelling with Non-Gaussian Innovations. *Journal of Time Series Analysis*, **9**, 155-168. [19]

(131) W.K. LI, H. WONG and Y.V. HUI (1987) Fractional Modelling on Emergency Room Attendance Data. *Journal of Applied Statistics*, **14**, 239-249.

(132) W.K. LI and A.I. McLEOD (1986) Fractional Time Series Modelling, *Biometrika*, **73**, 217-221. [80]

(133) T.K. MAK, W.K. LI and Y.C. KUK (1986) The Use of Surrogate Variables in Binary Regression Models. *Journal of Statistical Computation and Simulations*, **24**, 245-254.

(134) W.K. LI (1985) Distribution of Residual Autocorrelations in Multivariate Autoregressive Index Models. *Biometrika*, **72**, 686-688. [4]

(135) S.Y. LEE and W.K. LI (1985) The Lead-lag Relationship of Money, Income and Prices in Malaysia. *Singapore Economic Review*, **30**, 68-76.

(136) W.K. LI (1984) On the Autocorrelation Structure and Identification of Some Bilinear Time Series. *Journal of Time Series Analysis*, **5**, 173-181. [9]

(137) A. I. McLEOD and W.K. LI (1983) Diagnostic Checking ARMA Time Series Models Using Squared-Residual Autocorrelations. *Journal of Time Series Analysis*, **4**, 269-273. [303]

(138) W.K. LI and Y.V. HUI (1983) Estimation of Random Coefficient Autoregressive Process: An Empirical Bayes Approach. *Journal of Time Series Analysis*, **4**, 89-94. [4]

(139) S.Y. LEE and W.K. LI (1983) Money, Income, Prices and Their Lead-Lag Relationships in Singapore. *Singapore Economic Review*, **28**, 73-87. [1]

(140) W.K. LI and A. I. McLEOD (1981) Distribution of Residual Autocorrelations in Multivariate ARMA Time Series Models. *Journal of the Royal Statistical Society B*, **43**, 231-239. [85]

Monograph: W.K. LI (2004) *Diagnostic Checks in Time Series.* Monograph Series on Statistics and Applied Probability, Chapman & Hall/CRC. [66]

Invited Contributions (Discussions; Encyclopaedia; Refereed Book Chapters)

(1) W.K. LI and G. LI (2009) Discussion on “Model Selection for Generalized Linear Models with Factor-Augmented Predictors” by T. Ando and R. Tsay. *Applied Stochastic Models in Business and Industry,* **25**, 237-239.

(2) W. K. LI (2009) The Threshold Approach in Volatility Modelling in *Exploration of a Nonlinear World: An Appreciation of Howell Tong’s Contributions to Statistics* (Kung-Sik Chan, Editor), World Scientific, Singapore.

(3) W.K. LI and G. LI (2009) Discussion on “Analyzing Short Time Series Data from Periodically Fluctuating Rodent Populations by Threshold Models: A Nearest Block Boostrap Approach”, *Science in China*, *Series A*, **52**, 1109-1110.

(4) E.H.C. WU, P.L.H. YU and W. K. LI (2006) An Independent Component Ordering and Selection Procedure Based on the MSE Criterion in *ICA 2006* (J. Rosca et. al. Editors), pp286-294, Springer-Verlag, Berlin

(5) T.S.T. WONG and W.K. LI (2006) A Note on the Estimation of Extreme Value Distributions Using Maximum Product of Spacings in *Time Series and Related Topics, IMS Lecture Notes-Monograph Series*, **52**, 272-283. [2]

(6) W.K. LI and H. TONG (2001) Time Series: Advanced Methods in "*International Encyclopaedia of Social and Behavioral Sciences",* V23, 15699-15704, Elsevier Science.

(7) Y.N. LEE and W.K. LI (2000) On Smooth Transition Double Threshold Models. In *Statistics and Finance: An Interface,* 205-225, Editors: W.S. Chan, W.K. LI & H. Tong, Imperial College Press

(8) Y. XIA, W.K. LI and H. TONG (2000) A Note on Kernel Estimation in Integrated Time Series. *Statistics and Finance: An Interface,* 86-93, Editors: W.S. Chan, W.K. LI & H. Tong, Imperial College Press.

(9) W.K. LI (1999) Double Threshold ARCH Models. Contribution to the *Encyclopaedia of Statistical Sciences*, update volume III, pp.188-190. Editor-in-chief: S. Kotz, Wiley: New York.

(10) W.K. LI (1990) Discussion of the paper "Chance or Chaos?" by Professor M.S. Bartlett in the *Journal of the Royal Statistical Society, Series A.*

(11) W.K. LI (1989) Discussion of the paper "Space-time Modelling with Long-memory Dependence: Assessing Ireland's Wind Power Resource" by J. Haslett and A.E. Raftery in *Applied Statistics*, **v38**, no. 1, 36.

(12) Y.V. HUI and W.K. LI (1987) Predicting Demands in a Multi-Item Environment. *Time Series and Econometric Modelling* (Editors: I.B. MacNeill and G.J. Umphrey), 91-99. Reidel: Dordrecht.

(13) W.K. LI (1987) The Akaike Information Criterion in *Threshold Modelling. Nonlinear Time Series and Signal Processing* (Editor R.R. Mohler), Springer Lecture Notes in Control and Information Sciences, 88-96, Springer: New York

(14) K.W. HIPEL, A.I. McLEOD and W.K. LI (1985) Causal and Dynamic Relationships between Natural Phenomena. *Time Series Analysis: Theory and Practice*, **V6** (Editor: O.D. Anderson, J.K. Ord. and E.A. Robinson) 13-24, North-Holland: Amsterdam.

Book Reviews, Consultation Report and Other Articles:

(1) W. K. LI (2011) Book review on “Introductory Time Series with R”, by Cowpertwaite and Metcalfe, *Biometrics,* **67**, 329.

(2) W.K. LI (2003) The Nobel Laureates in Economics 2003: their contributions. *Hong Kong Statistical Society Bulletin*, **26(2)**, 2-8.

(3) W.K. LI and Philip Yu (2003) The 2003 Autumn Conference of the Korean Statistical Society. *Hong Kong Statistical Society Bulletin*, **26(2)**, December, 2003, 9-10.

(4) C.S. WONG and W.K. LI (2001) A Mixture Time Series Model for the Hang Seng Index. *Hong Kong Statistical Society Bulletin*, **23(4)**, 6-9.

(5) W.K. LI (2000) Some Events of the Hong Kong Statistical Community in 1999, *Bulletin of the International Chinese Statistical Association*.

(6) K. LAM, P. YU, H. TONG, W.K. LI and S.M. SHEN (1998) Consultation Report: BOC Personal Banking System, Versitech Ltd.

(7) M.K.P. SO, K. LAM and W.K. LI (1997) The Historical Volatility of the S & P500. *The Hong Kong Economic Journal*, 11-9-1997, in Chinese.

(8) W.K. LI (1995) Review on "Hilbert Space Methods in Probability and Statistical Inference" by C. Small and D.L. McLeish. Wiley-Interscience, 1994. *Hong Kong Statistical Society Bulletin*, **18(1)**, 18-19.

(9) W.K. LI (1994) Review on "An Introduction to the Bootstrap" by B. Efron and R.J. Tibshirani. Chapman & Hall, 1993. *Hong Kong Statistical Society Bulletin*, **17(4)**, 12-13.

(10) W.K. LI (1993) On the Derivation of Some Necessary Conditions for Stationarity in Time Series. *Hong Kong Statistical Society Bulletin*, **15(4)**, 5-6.

(11) W.K. LI (1993) On the Degrees of Freedom of the Portmanteau Statistic When a Mean is Estimated. *Hong Kong Statistical Society Bulletin*, **15(3)**, 6-7.

(12) W.K. LI (1988) Review on "Concise Probability Theory with Markov Chains: For Mathematical Sciences and Operations Research", by S.C.K. Chu. *Hong Kong Statistical Society Bulletin*, **11**, 7-8.

(13) W.K. FUNG and W.K. LI (1987) An Interview with Professor S. Donnan, Head of Community Medicine, C.U.H.K. *Hong Kong Statistical Society Newsletter*, **10**, 2-5.

(14) W.K. LI (1987) An Interview with Dr. C.C. Greenfield, Commissioner to the Census and Statistic Department. *Hong Kong Statistical Society Newsletter,* **9**, 3-5.

(15) S.F. LAU and W.K. LI (1987) An Empirical Comparison of the Box-Jenkins and the Structural Approach to Time Series Modelling. *Statistika*, 1987-1988, 10-16.

(16) K. LAM and W.K. LI (1986) An Interview with Professor Peter Lumb. *Hong Kong Statistical Society Newsletter,* **9**, 2-5.

Editorial Boards/Editorship:

1. Associate Editor, *Communications in Statistics: Theory and Methods*. (1999-2003)
2. Associate Editor, *Communications in Statistics: Simulation and Computation*. (1999-2003)
3. Associate Editor, *Statistica Sinica,* Academia Sinica (since 1999).
4. Associate Editor, *Applied Stochastic Models in Business and Industry*. (International Statistical Institute (since 2003)
5. Editorial Advisory Board Member, *Journal of Applied Statistics*, UK (since August 2008)
6. Co-editor, Monograph: *Statistics and Finance: An Interface* (2000) published by the Imperial College Press.
7. Guest Co-Editor: Threshold Models and New Developments in Time Series, special theme in *Statistica Sinica* **17(1),** January, 2007.
8. Guest Co-Editor: Nonlinear Time Series: Threshold Modelling and Beyond, Special Issue of the journal *Statistics and Its Interface*, June 2011, International Press of Boston.
9. Associate Editor, *Journal of Business and Economic Statistics*, July 1, 2012 – June 30, 2015.

HKRGC GRF and University Grants:

1. Hong Kong Research Grants Council GRF 2015-2016, “On the Generalized Conditional Wishart Process and Its Extensions.

2. CRF grant (2012-2013), “Ecology and biodiversity of benthic marine ecosystems before and after the trawling ban in Hong Kong coastal waters”. (Co-I) Amount awarded HKD 7.3 million. (PI: Prof Kenneth Leung, School of Biological Sciences)

3. Hong Kong Research Grants Council GRF Grant HKU703711P, “The Buffer Process; A New Type of Threshold Models”, HKD 877,000, 2012-2014(on-cost included). (Principal Investigator)

4. Extension of the Area of Excellence (AOE) project Marine Environmental Research and Innovative Technology (2009-2011, $23.58m) (Co-investigator, originally led by HKCityU, now by Professor Rudolf Wu, HKU).

5. HKU Grid Point for Systems Research and Applications in Multiple Disciplines, UGC Special Equipment Grant (SEG) 2009, $10, 000, 000 (Co-investigator).

6. Sustainable Water (Sustainable Environment Strategic Research Theme, Faculty of Science, HKU, 2009), $600,000 from Faculty of Science (Co-Investigator).

7. HKRGC GRF grant HKU708908P, “Statistical Inference for the Hyperbolic Generalized Conditional Autoregressive Heteroscedastic (HYGARCH) model and Extensions”, $579,610. 2009-2011 (Principal Investigator)

8. HKRGC GRF grant HKU703606P, “Statistical Inference for Time Series with Threshold Moving Average Structure”, $557,690. 2007-2009 (Principal investigator)

9. HKRGC GRF grant HKU703104P, “Least Absolute Deviations Estimation and Inference for Time Series with Conditional Heteroscedastic Errors”, $318,000. 2005-

2007 (Principal investigator) – Completed

10. Area of Excellence (AOE) project Marine Environmental Research and Innovative Technology (2004-2009), (Co-investigator), average yearly funding about $125,000.

11. Competitive grant under the Germany/Hong Kong joint research scheme 2000-2001, sponsored by the RGC and the Deutscher Akademischer Austauschdienst (DAAD). (Principal investigator on the Hong Kong side)

12. HKRGC GRF grant HKU 7028/00p, "Common Nonlinear Dynamics in a Panel of Time series", HK$287,817 (Principal investigator) - Completed

13. HKRGC HKU7149/98H,"An Approach to Nonlinear and Nonstationary Time Series Modelling", $642,000. 1998-2002. (Principal investigator) – Completed

14. HKRGC Non-Linear Multiple Time Series Analysis with Application, $333,000. 1995-1998. (Principal investigator) - Completed.

15. HKRGC Investment Risk Related Problems in Actuarial Science, $475,000. 1998-2000. (Co-investigator)

16. HKRGC Analysis & Prediction of Chaotic Dynamics with Special Reference to Hy drometeorological Time Series, $452,000. 1997-2000. (Co-investigator) – Completed.

17. Evaluation of Telephone Surveys in Hong Kong (Co-investigator, CRCG c. 1989).

18. Short Term Forecasting of Tide Heights in Hong Kong (Co-investigator, CRCG c. 1989).

Conference Organiser/Invited Conference Participation and Seminars:

(1) Invited Speaker, Nonlinear Time Series Analysis: Thresholding and Beyond, London School of Economics and Political Science, Sept., 19-20, 2014.

(2) Invited Speaker, Institute of Mathematical Statistics - Asia Pacific Rim Meeting (IMS-APRM) 2014, National Taiwan University, June 30 – July 4, 2014.

(3) Plenary Speaker, Fourth Singapore Conference on Statistical Science, National University of Singapore, Feb 6-7, 2014.

(4) Invited Speaker, 9th International Conference of the International Chinese Statistical Association, HKBU, December, 20-23, 2013.

(5) Invites Speaker, Frontiers of Statistics and Forecasting, Academia Sinica, Taipei, Dec., 17 -18, 2013.

(6) Chairman, Local Organising Committee, Young Statistician Meeting YSI2013, August 23-24, 2013, HKU, a satellite event of the 59th World Statistics Congress (The biennial flagship conference of the International Statistical Institute).

(7) Co-organiser of the International Statistical Institute-HKU short course, August 22-25 2013, HKU, a satellite event of the 59th World Statistics Congress.

(8) Organiser and Chair, Session: History II: Pierre Remond de Montmort, Thomas Bayes and Probability in China (IPS036), 59th World Statistics Congress, August 25-30,

2013, Hong Kong Convention and Exhibition Centre.

(9) Discussant, Session: Nonlinear financial time series modelling (IPS055), 59th World Statistics Congress, August 25-30, 2013 Hong Kong Convention and Exhibition Centre.

(10) Invited Speaker, Session: Applications on modelling time correlated count processes (IPS013), 59th World Statistics Congress, August 25-30, 2013, Hong Kong Convention and Exhibition Centre.

(11) Invited speaker, International Congress of Chinese Mathematicians, July 14-19, 2013, National Taiwan University. I was the only statistician representing Hong Kong.

(12) Distinguished lecturer at the DL Session 17, "What next in Time Series" at the 2nd Institute of Mathematical Statistics Asia Pacific Rim Meeting (IMS-APRM) held at Tsukuba, July 2-4, 2012.

(13) Invited speaker at the Joint Workshop on Recent Development in Statistics and Biostatistics, help at HKPolyU, 18-19 December, 2012.

(14) Keynote Speaker, Second Singapore Conference on Statistical Science 19 & 20 September 2011 Venue: NUS

(15) Invited moderator of the discussion panel for the session: Basel III – What Impact Will This Have on Your Existing Basel II-Compliant Plan, The Asian Banker Summit, 2011, JW Marriott, Hong Kong, April 6-8, 2011. (Organised by the Asian Banker, Co-hosted by the Hong Kong Association of Banks. I was the only academic in the entire conference)

(16) Invited speaker, Eighth International Chinese Statistical Association International Conference, Guangzhou University, Guangzhou, China, December, 19-22, 2010.

(17) Organiser, HKU-Stanford Conference in Quantitative Finance, HKU, December 10-11, 2010. (Jointly organised with Dept of Mathematics)

(18) Invited speaker, Sixth Annual Conference of the Asia-Pacific Economic Association, Hong Kong Baptist University, July 8-9, 2010.

(19) Invited speaker, Probability and Statistics: International Conference on the 100th Anniversary of Professor P. L. Hsu's Birthday, Peking University, July 5-7, 2010

(20) Invited speaker, International Symposium on Econometrics of Specification Tests in 30 Years, Wang Yanan Institute for Studies in Economics, Xiamen University, Xiamen, China, June, 24-25, 2010.

(21) Conference Co-Chair, Nonlinear Time Series: Threshold Modelling and Beyond; An International Conference in Honour of Professor Howell Tong, December 17-19, 2009, HKU.

(22) Invited speaker and organiser, First Singapore Conference on Statistical Finance, National University of Singapore, October 16, 2009.

(23) Invited speaker, the 1st Institute of Mathematical Statistics Asia Pacific Rim Meeting, Seoul National University, June 28-July 1, 2009. Chaired also an invited session.

(24) Invited speaker, IMS-China International Conference on Statistics and Probability, Weihai, China, July 3-6, 2009. Chaired also an invited session.

(25) The 29th International Symposium on Forecasting 2009, June 21-24, Sheraton Hotel, Hong Kong, sponsored by the International Institute of Forecasters.
I have two invited talks and I presented one of these while the other one was presented by my colleague Dr P. Yu. I was also invited to chair a contributed session.

(26) Co-organised with Department of Mathematics, HKU, the Conference on Financial Modelling and Related Topics, Jan 16-17, 2009, University of Hong Kong**.** I also presented a paper.

(27) Invited to Chair an Invited Speaker session in The Twelve International Congress on Insurance: mathematics and Economics, July 16-18, 2008, Tsing Hua University.

(28) Invited speaker, Oberwolfach Mini-Workshop: Time Series with Sudden Structural Changes, Germany, February 24-29, 2008. (This is a prestigious invitation limited to only 15 participants worldwide. I am the only participant from Asia.)

(29) Co-organiser and speaker, International Conference on Mathematics of Finance and Related Applications, HKU, 3-4 January 2008.

(30) Invited speaker, Workshop on Nonlinear and Complex System Analysis, Australia, September 27-28, 2007.

(31) Keynote speaker, The Third Symposium on Econometric Theory and Application, HKUST, April 13-15, 2007.

(32) Invited speaker, Hong Kong Statistical Society 30th Anniversary Workshop, Feb 10, 2007.

(33) Invited speaker, International Conference on Statistical Models for Financial Data II, Graz University of Technology, May 23-26, 2007.

(34) Invited paper presentation, The 2007 International Association for Statistical Computing-Asian Regional Section – Special Conference, Press Centre, Seoul, Korea, June 7-8, 2007.

(35) Invited Organizer and Chair of the Session on Recent Developments in Nonlinear Time Series, in the 2007 International Chinese Statistical Association International (ICSA) Conference, Academia Sinica, Taipei, June 25-27, 2007. (I presented also a paper in the session.)

(36) Invited speaker, Workshop at Banff International Research Station entitled, "Statistics at the Frontiers of Science, Banff, Alberta, Canada, June 24-29, 2006

(37) Invited speaker, Inaugural Conference of the Research Centre of Statistical Sciences at the Academia Sinica, Beijing, China, July 6-8, 2005.

(38) Invited speaker, Statistical Conference on the 70th Birthday of Professor S.S. Mao, Eastern China Normal University, Shanghai, China, July 6, 2005.

(39) Invited speaker, Workshop on Financial Engineering and Risk Management, USTC Shanghai Institute for Advanced Studies, Shanghai, China, July 3-4, 2005.

(40) Member, Programme Committee for the First Symposium on Econometric Theory and Applications, Academia Sinica, May 18-20, 2005.

(41) Invited speaker, the 5th International Conference on Statistical Finance and Financial Engineering, Hitotsubashi University, Tokay, Japan, March 16, 2005.

(42) Organiser of a session on International Conference in Statistics, HKBU, June 20-24, 2005.

(43) Invited speaker, International Workshop on Applied Mathematics and Statistics, HKBU, December 16, 2004.

(44) Major organiser of the International Conference on Threshold Models and New Developments in Time Series, HKU, July 12-14, 2004.

(45) Organiser of a session on Nonlinear Time Series Models of the International Symposium on Forecasting 2004, Sydney, July 4-7.

(46) Invited speaker, Department of Mathematics, Baptist University of Hong Kong, May 13, 2004.

(47) Invited speaker, Symposium on Econometric Forecasting and High Frequency Data Analysis, May 7-8, 2004, organised by the National University of Singapore and the Singapore Management University.

(48) Invited speaker, Workshop on Multivariate Time Series, Heidelberg, February 25-28, 2004.

(49) Organiser and invited speaker of the international session, Statistical Risk Management at the Autumn Conference in 2003 of the Korean Statistical Society, Seoul, October 31 - November 1, 2003.

(50) Co-organiser (with the Hong Kong Institute of Monetary Research), Workshop on Financial Econometrics, HKIMR, December 13, 2002.
(51) Member, Scientific Committee for the International Conference on Applied Statistics, Actuarial Science and Financial Mathematics, December 17-19, 2002, HKU & HKPU.
(52) Invited speaker, Chaos, Non-linear Time Series and Related Topics, the Fourth Hakata Symposium, Kyushu University, October 21-23, 2002.
(53) Invited speaker, Hong Kong Institute of Monetary Research, September 5, 2002.
(54) Invited speaker, Taipei International Statistical Symposium and Bernoulli Society EAPR Conference, July 8-10, 2002.
(55) Invited speaker, Workshop in Data Mining and Modelling, Department of Mathematics, University of Hong Kong, June 27-28, 2002.
(56) Chairman of the Organizing Committee for the 5th ICSA International Conference to be held in Hong Kong, August, 2001. (Co-sponsored by the Institute of Mathematical Statistics.) Appointed by the Board of the International Chinese Statistical Association. An 90th anniversary activity of this University. (Over 300 participants from 14 countries and regions.)
(57) Invited by the Statistical Society of Canada to speak at its Annual Meeting held at Burnaby, British Columbia, June 10-14, 2001.
(58) Invited to present a paper at the University of Waterloo, Canada, June 8, 2001.
(59) Invited to present a paper at the University of Western Ontario, June 7, 2001.
(60) Invited to chair the session "Forecasting of Non-linear Time Series", in the 20th International Symposium on Forecasting, held in Lisbon, Portugal, June 21-24, 2000. I chaired also the session "Non-linear Modelling" in the same conference.
(61) Invited to organize the session on Forecasting of Nonlinear Time Series in the 20th International Symposium on Forecasting, Lisbon, Portugal, June, 2000.
(62) Invited to give seminars at the Stochkholm School of Economics, Sweden; The Department of Economic Statistics, University of Amsterdam; and the Econometric Institute, Erasmus University, Rotterdam, June 2000.
(63) Deputy co-ordinator of the Organizing Committee of the International Workshop in Financial Statistics, Gold Coast Hotel, Hong Kong, July 5-8, 1999.
(64) Deputy Co-ordinator of the Symposium on Financial Risk and Statistics, Conrad International Hotel, Hong Kong, July 9, 1999.
(65) Chairperson of the Invited Paper Session 32, Data-Analysis of Non-linear Physical Time Series in the 52nd Session of the International Statistical Institute, Helsinki, 1999.
(66) Invited Speaker, 1999 NBER/NSF Time Series Conference, Taipei, Academia Sinica. Sponsored by the National Bureau of Economic Research, National Science Foundation, U.S.A. and the National Science Council, Executive Yuan, R.O.C.
(67) Keynote Speaker, Symposium on Financial Risk and Statistics (1999), Conrad International Hotel, Hong Kong. Organized by the Centre of Financial Time Series, University of Hong Kong.
(68) Member, Program Committee, The 4th ICSA International Conference 1998, Kunming, China.
(69) Invited Speaker, Statistical Conference in Honour of Professor N.N. Chan, 1998 CUHK.
(70) Invited Speaker, 1998 Taipei International Statistical Symposium August 15-17, Taipei Taiwan.
(71) Invited Speaker, Joint Statistical Meetings: American Statistical Association, Institute of Mathematical Statistics, International Biometric Society, Statistical Society of

Canada, August 10-14, 1997, Anaheim, U.S.A.

(72) Invited Speaker, International Symposium on Contemporary Multivariate Analysis, Hong Kong, May 19-22, 1997.

(73) Invited Speaker, Econometric Society Australian Meeting, July 10-12, 1996, Perth, Australia.

(74) Co-ordinator, The Hong Kong Time Series Study Group, 1993-1997. Organized a one day workshop in time series at HKU, June 5, 1995.

(75) Invited Speaker, Seminar on Better Financial Decisions through Statistics, Hong Kong Statistical Society, 1992.

(76) Invited Speaker, The 1st Conference on Recent Developments in Statistical Research, International Chinese Statistical Association, December 15-17, 1990, Chinese University, Hong Kong.

(77) Invited to the Research Workshop in Non-Linear Time Series, University of Edinburgh, July 12-25, 1989. Sponsors: Science and Engineering Research Council, U.K. and the US Army Research, Development and Standardization Group (U.K.) This is a close-door conference with just forty participants worldwide. Most of them are experts in non-linear time series analysis.

Other Conferences Attended:

(1) Contributed a paper in the session 302, Inference for Structured Models, at the 2010 Joint Statistical Meeting, Vancouver, Canada.

(2) Contributed a paper in the session 468, Confidence Interval and Hypothesis Testing, at the 2006 Joint Statistical Meeting, Seattle, U.S.A.

(3) 1999 52nd Session of the International Statistical Institute (contributed paper session), Helsinki, Finland.

(4) 1994 Workshop in Applied Statistics. Hong Kong Baptist College.

(5) The Second International Conference on Financial Econometrics. Queenstown, New Zealand (1993).

(6) International Symposium on Multivariate Analysis and Its Application (1992), Hong Kong.

(7) The Fourth Annual PACAP Finance Conference (1992), Hong Kong.

(8) The Annual Meeting of the American Statistical Association, San Francisco, California, 1987.

(9) Festschrift in Honour of Professor V.M. Joshi's 70-th Birthday, London, Ontario, 1985.

(10) The Annual American Statistical Association Meeting, Toronto, Ontario, 1983.

(11) The Third International Conference in Time Series Analysis, Houston, Texas, August 1980.

(12) The Annual American Statistical Association Meeting, Houston, Texas, August 1980.

(13) Computer-Statistics Interface Conference, University of Waterloo, May 1979.

Graduate Student Supervision:

(a) Ph.D. graduates

(1) H. Wong (1995): Topics in Conditional Heteroscedastic Time Series Modelling. (Full Professor, HKPolyU.)

(2) M.K.P. So (1996): (Co-supervise with Prof. K. Lam) On the Statistical Modelling of Stochastic Volatility and Its Applications to Financial Markets. (Associate Professor with tenure, HKUST.)

(3) S. Ling (1997): Stationary and Nonstationary Time Series Models with Conditional Heteroscedasticity. (Research Fellow at the University of Western Australia, 1997-2000. (Full Professor, HKUST.)

(4) A.C.S. Wong (1998): Statistical Inference for Some Nonlinear Time Series Models. (Research Assistant Professor at HKU, 1997-2001. Now Associate Professor with tenure at CUHK.)

(5) Y. Xia (1999): On Some Nonparametric and Semiparametric Approaches to Time Series Modelling. (Full Professor, National University of Singapore)

(6) P.W. Fong (2001): Topics in Financial Time Series Analysis: Theory and Applications. (Senior Manager, Hong Kong Monetary Authority)

(7) Bo Fu (2003): (Co-supervise with T.W.K. Fung) Some Topics in Longitudinal Data Analysis and Panel Time Series Models. (Senior Lecturer in Statistics, University College London)

(8) Shusong Jin (2005): Nonlinear Time Series Modelling with Application to Finance and Other Fields. (Lecturer, Fudan University)

(9) R. Hale (2006): (Co-supervise with Dr. W. Yim at the Department of Earth Sciences.) Quantifying Accuracy of Measurements in the Earth Sciences by Examination of residuals in Statistically Redundant Observations. (Director, EGS(Asia) Ltd.)

(10) Guodong Li (2007): On Some Nonlinear Time Series Models and the Least Absolute Deviation Estimation. (Assoc. Professor, University of Hong Kong)

(11) Chun-Kit Kwan (2008): (Co-supervise with K.W. Ng) Statistical Inference for some Financial time Series Models with Conditional Heteroscedasticity. (Lecturer, Community College, HKPolyU)

(12) Gilbert Lui (2008): (Co-supervise with Professor Joseph Lee) Some Statistical Topics on Sequential Data Assimilation. (Lecturer at HKU)

(13) Tony S T Wong (2009): On Some Issues in the Modelling of Extreme Observations. (Asst. Professor, Harbin Institute of Technology)

(14) Michael Arthur Friedlander (2011): A Robust Non-Time Series Approach for Valuation of Weather Derivatives and Weather Risk. (Hedge Fund Manager, Financial Sector HK)

(15) Muyi Li (2011): Statistical Inference on Some Long Memory Volatility Models. (Assoc. Prof, Xiamen University)

(16) Chao Wang (2012): Statisti8cal Inference for Some Discrete-valued Time Series.(Post Doctoral Fellow, University of Iowa)

(17) Kam Pui Wat (2012): Discrete-Time Insurance Risk Models with Dependence Structures. (Lecturer, HKU)

(18) Bo Guan (2013) On Some New Threshold-Type Time Series Models. (Senior Analyst, Citi Securities, Beijing)

(19) Ryan H L Ip (2015) On Some Topics in Spatio-Temporal Modelling. (Lecturer,

Charles Sturt University, Australia)

(b) M.Phil. Graduates

(1) C.L. Lo (1987): Some Contributions to Robust Time Series Modelling.

(2) Michael C.O. Kwok (1988): Some Results on Higher Order Markov Models.

(3) T.W. Li (1991): Forecasting of Tide Heights - an application of smoothness priors in time series modelling. (Joint supervision with J. Bacon-Shone)

(4) W.K. Pang (1993): Time Series Analysis of Meteorological data.

(5) T.M. Ng (1993): Tests of Seasonal Differencing with a Break-point.

(6) M.K. Lai (1994): Topics in Directional Time Series Analysis.

(7) C.W. Li (1994): On a Double Threshold Time Series Model.

(8) Y.N. Lee (1998): On a Double Smooth Transition Time Series Model.

(9) Pauline W.Y. Tsang (2000): Aspects of Modelling Stochastic Volatility.

(10) Doris S.Y. Chong (2001) (joint with Prof. H. Tong): Comparison of Estimates of Autoregressive Models with Superimposed Errors.

(11) May W.M. Wong (2001) (joint with Prof. H. Tong): Some Topics in Model Selection in Financial Time Series Analysis.

(12) Also co-supervised one M.Phil. at the Hong Kong Polytechnic University.

(13) Karen K.Y. Liu (2005) (joint with Prof. K.W. Ng): Bayes and Empirical Bayes Estimation for the Panel Threshold Autoregressive Model and Non-Gaussian Time Series.

(14) Kris L.M. Wan (2005) (joint with Dr. K.C. Yuen): Ruin Analysis of Correlates Aggregate Claims Models.

(15) Simon Sai Man Kwok (2006): Statistical Inference of Some Financial Time Series Models.

(16) Zhou Xuan (2007): On the Estimation and Testing of Some Threshold Models.

(17) Cheng Lap Yan (2007) (joint with Dr. P. Yu): Extension of Price Trend Models with Applications in Finance.

(18) Xixin Cheng (2008) (joint with Dr. P. Yu): Mixture Time Series Models and Their Applications in Volatility Estimation and Statistical Arbitrage Trading.

(19) Eric Lin (2009) On the Statistical Inference of Some Nonlinear time Series Models

(20) Qi Ming Chen (2011) Statistical Inference for the APGARCH and Threshold APGARCH Models

(21) David Lee (2012) Statistical Inference of a Threshold Model in Extreme Value Analysis

(22) Pak Hang Lo (2014) On a Buffered Conditional Volatility Process

(23) Sai Shing Ma (2014) On the Long Memory Autoregressive Conditional Duration Models.

(c) M.Soc.Sc. Dissertations

(1) K.L. Leung (1989): An Experiment with Turning Point Forecasts Using Hong Kong Time Series Data.

(2) C.W. Liu (1989): Forecasting the Demand of Public International Telecommunication Originating in Hong Kong.

(3) P. Ma (1989): The Heteroscedastic Structure of Some Hong Kong Price Series.

(4) M.C. Ng (1991): Cyclical Symmetry and the Business Cycle: The Hong Kong Case.

(5) C.P. Cheung (1991): Multivariate Time Series Analysis on Airport Transportation.

(6) C.W. Mok (1993): A Comparison of Two Approaches to Time Series Forecasting.

(7) S.S. Yu (1993): Application of Markov Regression Models.

(d) Current M.Phil. Students

(1) Yao Zheng, since Sept., 2013.

(2) Ruochen Zeng, since Sept., 2013.

(e) Current Ph.D. Student

(1) Patrick Fo Chun Ng, from Sept., 2009 (joint with Dr. Philip Yu).

(2) Ryan Ip, from Sept. 2011.

(3) Shen Keren, from Sept. 2013.

Summary on Teaching:

University of Hong Kong:

Course (* = a graduate course)	Lecture hours	Approximate student nos.	
17318 Time Series Analysis	36	30-70	1982-89, 1996-97, 2000, 2004
24210 & 17336 Statistics Project	10	1-3	1985-96
17233 Survey Sampling	24	30-50	1987-89
17605 Time Series Analysis*	36	10-20	1989, 1991
17030 Parametric Statistical Analysis	36	20	1987
17809 Statistics for the Physical Sciences	36	30-50	1983-85
17501 Foundation of Statistics*	36	20	1991
17206 Demographic Science	24	30-70	1991-93
17913 Advanced Topics in Statistics*	8	15	1993-95

17903 Advanced Models in Time Series*	12	15	1994-96
17103 Introductory Statistics	36	120-250	1993-95
17202 Statistical Inference	36	70	1995
17915 Applications of Statistics*	6	10	1995, 1996
17909 Reading Course (A)*			1996
STAT1004 Probability & Statistics	36	66	1998
STAT0401 Business Forecasting	24	27	2002
STAT3107 Financial Time Series Analysis	24	6	2002
STAT3109 The Statistics of Investment Risk II	24	14	2003
STAT3301/3101 Time-series Analysis	24	29	2000, 2002, 2004
STAT7003 Foundations of Statistics*	36	13-30	1998, 2000, 2002, 2004
STAT17262 Linear Models & Forecasting	24	35	2000-01
STAT8003 Time Series Forecasting	24	35	2001, 2004
STAT8007 Statistical Methods in Finance*	30	15	2000
STAT0801 Financial Time Series Analysis	24	15	2001
STAT3308 Financial Engineering	36	49	2006
STAT8014 Risk Analysis	24	45	2006, 2007, 2008
STAT3306 Selected Topics in Statistics/ STAT6009 Research Methods in Statistics	8	20	2008
STAT3305 Financial Data Analysis	13	85	2009
STAT3321 Credit Risk Analysis	36	110	2009-2011 (3 times)
STAT6015 Advanced Quantitative Risk Management and Finance	36	20	2011 – 2015 (5 times)
STAT1600 Statistics: Ideas and Concepts	36	110	2012 – 2014 (3 times)
CCST9039 Statistics and Our Society	24	120	2013 – 2015 (3 times)

National University of Singapore:

Course	Lecture hours	Approximate student nos.	
Honour Year Student Project	10	1	1982 - 1983
Introduction to Computing	26	100	1982
Mathematical Methods in Economics	26	10	1982
Statistics for the Social Sciences	26	200	1981, 1982

In general, I have received favourable feedbacks from students at the Staff-Student Consultative Committee and very good SET scores over the years.

I was instrumental in establishing the courses "17234 Business Forecasting", "17903 Advanced Models in Time Series", "STAST0801 Financial Time Series" and "STAT8007 Statistical Methods in Finance". I was the original proposer of the popular thematic course "Understanding the Financial Market" which has over 500 enrollment in 1998-99 and 1999-2000. I taught and was instrumental in creating the general education course "How to read figures in the newspaper". I chaired nearly all the departmental meetings on curriculum reform for both the undergraduate and the graduate programmes. Some IT was incorporated into STAT1004 for the first time in 1998-99. Very favourable feedbacks were received at the Staff-Student Consultative Committee for 17262 in 2000. I was one of the original proposers and designers of the Master of Financial Engineering programme (launched in 2001 by the School of Business with support from Statistics Dept.). I developed singly handed two entirely new courses STAT3321 Credit Risk Analysis and STAT6015 Advanced Quantitative

Risk management and Finance in 2010 and 2011 respectively. SET scores (teacher effectiveness) for these two courses in 2010-2011 being 72.9 and 76.8 respectively. (Dept. average=71).

Because of the transition to the new 4-year curricula, despite my heavy administrative role as department head I undertook to create two entire new courses namely,

(i) STAT1600 Statistics: Concepts and Ideas

and the common core course,

(ii) CCST9039: Statistics and Our Society.

I taught 1/3 of the former and ½ of the latter course with very encouraging SETL's. STAT1600 was offered both in the 1st and 2nd semesters with about 60 enrolments each. The common core course was fully packed with the maximum enrolment of 120. In 2012-2013 my teacher effectiveness SETL for STAT1600 was 73.2 and 74.2 respectively for the two semesters and the SETL for the common core course was 72.6. The former pair of scores is slightly above the departmental average of 72.2 and the latter on a par with the common core courses average of 73.6.

Administrative/Departmental Services HKU:

(1) Chairman, Review Panel of the TPG programmes: MSc(CompSc) and MSc(ECom&IComp) of the Department of Computer Science, May 2014.
(2) Co-ordinator, HKU Cost Centre 32 (Mathematics and Statistics), Research Assessment Exercise, 2014.
(3) Member, Review Panel of the Centre of Urban Studies and Urban Planning, 2013.
(4) Member, URC Sub-Committee for Support of Research Projects, April 1, 2011 – June 30, 2015. Chairman of Conference/Travel Grant Sub-group since Sept., 2011.
(5) Member, USPC Physical Science and Engineering Panel. 2011-2013.
(6) Professoriate member appointed by the Vice-Chancellor to the Advisory Panel for the Selection of the Director of the School of Business, June 2011.
(7) Acting Head, Department of Statistics and Actuarial Science, May 23-27, 2011.
(8) Member, Faculty Research Committee, since May 2011.
(9) Member, Service Award Selection Panel, Faculty of Science, May 2011.
(10) Acting USPC member for the Promotion and Tenure Panel, Faculty of Architecture. October, 2010 - March, 2011. (Acting for Professor David Dudgeon during his leave of absence)
(11) Acting Head, Department of Statistics and Actuarial Science, April 26 – May 3, June 12 – 21, 2010.
(12) Member, Review Panel for the Faculty of Business and Economics, 2008-2009.
(13) Member, Selection Panel of the Award for Teaching Excellence, Faculty of Science, 2007-2008, 2008-2009.
(14) Head, Department of Statistics and Actuarial Science, HKU (1/1/2006-31/12/2008)
(15) Member, Promotion and Tenure Panel for the Faculty of Business and Economics (since 2005)
(16) Member, Subcommittee for the Outstanding Research Award (2007-08)
(17) Member, Review panel of the Hong Kong Institute of Economics and Business

Strategy and the Asia-Pacific Economic Co-operation Study Centre, the Faculty of Business and Economics (2007)

(18) Member, Search Committee for Professor of Marketing and Professor of Finance in the Faculty of Business and Economics (representing the Vice-Chancellor, 2007-08)
(19) Member, Promotion and Tenure Panel for the Faculty of Science (since 2005)
(20) Elected member, Search Committee for the Dean of Science (2005-06).
(21) Member, Science Faculty Planning Committee (2004-2005).
(22) Member, Faculty Sabbatical Leave Committee (since 2004).
(23) Member, Science Faculty Human Resources Committee (2004-April, 2011).
(24) Associate Dean, Faculty of Social Sciences (10/1/2002-16/3/2003).
(25) Member, Board of Examination for Graduate Studies (19/3/2002-2008).
(26) Member, Committee on Research and Conference Grants (2000-2007).
Vice-Chairman, Committee on Research and Conference Grants (1/7/2001–30/6/2007).
(27) Chairman, Department Research Postgraduate Committee (9/1999–present).
(28) Chairman, Social Science Faculty Research Committee (1/7/2000-30/6/2002).
(29) Head, Department of Statistics, HKU (1/1997-31/12/1999).
(30) Faculty Curriculum Reform Task Force Group (1997-98).
(31) Working Group on Core Science courses for Non-Core Majors (1997-2000).
(32) Working Group on Core Humanities/Social Sciences courses for Science and Engineering students (1997-98).
(33) Elected member of the Committee for the Selection of Senior Teachers (1997-99).
(34) Faculty Working Group on Degree Examination Procedure for the Credit-based System, 1998.
(35) Founding member of the Centre of Distinction in Financial Time Series (1998-present).
(36) Acting Head, Department of Statistics, HKU (1/9/1996-31/12/1996).
(37) Member, Faculty Research Committee (1996-1998).
(38) Co-ordinator, Departmental Visitor's and Seminar Programming (1995-97).
(39) Advisory Committee on Departmental Affair (1994-1997) (by election).
(40) Departmental and Faculty Library Committee (1994-1995).
(41) Department representative, Committee for the Selection of Lecturers (1994-1995).
(42) Faculty Review Committee (1992-1994).
(43) Committee on Discontinuation (1992-1994).
(44) M.Soc.Sc. student admissions, 1987, 1989.
(45) B.Sc. course Selection Committee, 1988, 1994.
B.Soc.Sc. Course Selection Committee, 1987, 1988.
(46) Co-ordinator, department workshop on time series analysis 1986.
(47) Co-ordinator, department workshop on point processes, 1987.
(48) Department librarian 1984-1985.
(49) B Soc.Sc. admissions committee, 1984.

Refereeing:

Biometrika, Canadian Journal of Statistics, Communication in Statistics, Journal of the American Statistical Association, Journal of Applied Econometrics, Journal of Econometrics, The Econometric Journal, European Journal of Finance, Journal of Statistical Computation and Simulation, Journal of Business and Economic Statistics, Statistica Sinica, Southeast Asian Bulletin of Mathematics, Asia Pacific Journal of Management, Hong Kong Journal of

Business, International Statistical Review, Journal of the Royal Statistical Society *B*, Journal of Vibrations and Sound, Journal of Time Series Analysis, Computational Statistics and Data Analysis, International Journal of System Science, Probability and Statistics Letters, Statistics in Medicine, Stochastic Processes and Their Applications.

Consultation/Contracted Research:

(1) Analysis of the Relationship between Marine Water Quality parameters and Climatic and Other Environmental Factors. HKSAR Government Environmental Protection Department. PI: W K Li Co-I Kenneth M. Y. Leung. HK$515,000. (01/2012-10/2012)
(2) A US$37,000 contract from Microsoft to develop software on financial risk management for the C# environment (2004-2005).
(3) A $600,000 contract with Hong Kong Exchanges and Clearing Ltd. on risk management (2002-2003).
(4) A $200,000 contract with Hong Kong Monetary Authority for developing Economic & Financial Indicators (2002-2003).
(5) Development of a Personal Banking System for the Bank of China Group. (Joint with K. Lam, P.L.H. Yu and H. Tong). A one million dollar project completed in 1998 and launched in November 1999.
(6) Forecasting consultant, Citicorp, Hong Kong, 1987-1988.
(7) Short course on time series for statisticians, Department of Census & Statistics, Hong Kong Government, February - May, 1988.
(8) Advisor, the 1987 Chai Wan Survey on the Review of Development in Representative Government, conducted by YMCA, Chai Wan and Caritas Centre, Chai Wan.
(9) Research team member, BREAKTHROUGH CORPORATION (a non-profit Christian multi-media corporation), 1985-1987.
(10) Advisor, (1985) Ho Tung Technical School for Girls, Champion in the "Discover Hong Kong" project organized by the Outstanding Young Persons Association. Project Title: The Future of the Boat People in Hong Kong.
(11) Occasional counsels to members of the Department of Medicine and the School of Dentistry, University of Hong Kong. (Names of some consultees Drs. M. Ng, Hui W.M. and J. Hui (C.U.))

Professional Services:

(1) Member, International Statistical Institute Membership Election Committee, 2010-2013 (inclusive).
(2) External assessor for the tenure and promotion of Dr Ying Chen, National University of Singapore, 2013.
(3) Internal examiner of the Ph D thesis of Mr Yan Tze Leung, Dept of Geography, HKU, 2013.
(4) External examiner for Ph D candidate Mr Stanley Ko, Economics Dept., CUHK, 2013
(5) External assessor for the B Sc in Statistics programme, United International College, HKBU, 2012.
(6) External assessor for the validation of M Sc in Operations Research and Risk Analysis, HK PolyU, 2012.
(7) External assessor for the tenure and promotion of Dr Noelle Samia, North Western University, USA, 2012.

(8) Elected Council Member, International Statistical Institute, International Society for Business and Industrial Statistics, from Sept. 2011-Aug. 2013.
(9) Member, appointed by the International Statistical Institute, Committee on the History of Statistics, 2011-present.
(10) Panel member of the Physical Science Panel, Research Grants Council (RGC) of HKSAR from September 4, 2008 to June 30, 2010. (reappointed twice till June 30, 2014)
(11) Chairman of the Selection Committee of the Hong Kong Statistical Society Service Award since February, 2009
(12) Appointed Program Advisor by the Department of Finance and Risk Engineering, Polytechnic Institute of New York University on their proposed Actuarial Science and Risk Engineering track in 2008.
(13) Elected member of the Board of Directors for the International Chinese Statistical Association (2006-2008).
(14) Chairman, Professional Affairs Committee, Hong Kong Statistical Society, since 2003.
(15) Member, Statistics Advisory Board, Secretary for Financial Services, HKSAR Government, 1 June 2002 – June 2008.
(16) President for the Hong Kong Statistical Society 2000/2001, 2001/2002 and 2002-2003 sessions.
(17) External examiner for Mr. Terje Myklebust for the Degree of Doctor Scientiarum, University of Bergen, Norway (2002).
(18) External Examiner for two of the three BBA programmes in the Department of Management Sciences, City University of Hong Kong from January 2000 - 30 September 2002 (Reappointed twice from October 1, 2002 – September 30, 2007).
(19) Internal Examiner for the Ph.D. Thesis of Mr. A.B. Gurung, Department of Civil Engineering, the University of Hong Kong, 2000.
(20) Assessor for the Master of Arts in Quantitative Analysis for Business Programme, City University of Hong Kong, 1999.
(21) Assessor for the Hong Kong Council for Academic Accreditation, 1999.
(22) Assessor for a grant application to the Natural Sciences and Research Council of Canada, 1998.
(23) External Examiner for the Ph.D. thesis of Mr. J. Hay, Queensland University of Technology, Australia, 1998.
(24) Internal Examiner for the Ph.D. thesis of Ms. D.A.K. Fernando, Department of Civil Engineering, University of Hong Kong, 1997.
(25) Frequent assessor for strategical research grant applications for the City University of Hong Kong since 1996.
(26) Assessor for the BA(Hons) Managerial Statistics programme at the City University of Hong Kong, 1996.
(27) External Assessor for RGC grants applications 1995-2000.
(28) External Examiner, M.Phil. Thesis, more than 3 times for CUHK.
(29) Reviewer for NSF grant application (DMS-9208820), 1992.
(30) Advisor, Clinical Chemistry Quality Assessment Programme, Hong Kong Medical Technology Association, 1989-present. (Received 10-years services award.)
(31) Vice President, Hong Kong Statistical Society, 1992-1993.
(32) Publication Secretary, Hong Kong Statistical Society and Editor, Hong Kong Statistical society Newsletter, 1984-1985, 1986-1987.
(33) Lecturer, Joint School Science Course, 1985.

Citation Appendix
Citations in Textbooks, Monographs and Computer Packages:

My results were used in **6** Computer Software Packages, **24** textbooks, **40** monographs and **7** encyclopaedias/handbooks with a total of **153** citations as of 09-10-2009 which are **not included in the Web of Science**.

(T = Textbook, M = Monograph, E = Encyclopaedia/Handbook)

(1) W.K. LI and A.I. McLEOD (1981) Distribution of Residual Autocorrelations in Multivariate ARMA Time Series Models. *Journal of the Royal Statistical Society B*, **43**, 231-239.

(a) (i) The theoretical result of this paper has been programmed and incorporated into the NAG Fortran Subroutine Library as routine G13DTF, and
(ii) the McLeod–Hipel Time Series Package.

(b) Cited in:

(M) [1] Applied Time Series Analysis of Economic Data (1983) by Paul Newbold and also by J. Ledolter. U.S. Department of Commerce and Bureau of the Census.

(M) [2] The Theory and Practice of Econometrics, 2nd ed. (1985) by G.G. Judge, W.E. Griffiths, R. Carter Hill, Helmut Lütkepohl, T.C. Lee. John Wiley & Sons.

(M) [3] Forecasting Economic Times Series, 2nd ed. (1986) by C.W.J. Granger and P. Newbold. Academic Press.

(M) [4] Forecasting, Structural Time Series Models and the Kalman Filter (1989) by A.C. Harvey. Cambridge University.

(T) [5] Time Series Analysis: univariate and multivariate methods, 1st and 2nd editions (1990, 2006) by W.W.S. Wei. Addison-Wesley.

(T) [6] Introduction to Multiple Time Series Analysis (1991) by Helmut Lütkepohl. Springer-Verlag.

(M) [7] ARMA Model Identification (1992) by B.S. Choi. Springer-Verlag.

(T) [8] Elements of Multivariate Time Series Analysis (1993) by G.C. Reinsel. Springer-Verlag.

(T) [9] 時間數列分析與預測 (Time Series Analysis and Forecasting) (1993) by 林茂文, Taipei.

(T) [10] Econometric Models, Techniques, and Applications (1996) by M. Intriligator, R.G. Bodkin and Cheng Hsiao. Prentice Hall.

(E) [11] Encyclopaedia of Statistical Sciences Update Vol.2 (1998) by G.C.

Reinsel.

(M) [12] A Course in Time Series Analysis (2001) by D. Pena, G.C. Tiao and R.S. Tsay. John-Wiley.

(T) [13] Analysis of Financial Time Series, 1st and 2nd editions (2002, 2005) by R.S. Tsay. John-Wiley.

(M) [14] New Introduction to Multiple Time Series (2005) by H. Lütkepohl. Springer-Verlag.

(E) [15] Palgrave Handbook of Econometrics, Vol. 1 (Editors: T.C. Mills and K. Patterson) (2007) by H. Lütkepohl. Palgrave MacMillan.

(2) W.K. LI and Y.V. HUI (1983) Estimation of Random Coefficient Autoregressive Process: An Empirical Bayes Approach. *Journal of Time Series Analysis*, **4**, 89-94.

Cited in [14] and

(T) [16] Cross-Sectional and Time Series Data Analysis (1989) by T.E.D. Dielman. Marcel-Dekker.

(3) A.I. McLEOD and W.K. LI (1983) Diagnostic Checking ARMA Time Series Models Using Squared-Residual Autocorrelations. *Journal of Time Series Analysis*, **4**, 269-273.

(a) This paper has been included in the International Library of Critical Writings in Econometrics: Time Series Vol. II, editor A.C. Harvey, Elgar.

(b) The result of this paper has been incorporated into the following five computer softwares:

(i) STAR3 accompanying [18]
(ii) ITSM (96) accompanying [20] and [26].
(iii) The Autoreg procedure in SAS/ETS version 6 on wards, 2nd edition.
(iv) The McLeod-Hipel Time Series Package.
(v) The Time Series Library of the R package as procedure McLeod.Li.test.

(c) Cited in [4], [5], [7], [12], [13] and

(T) [17] The Econometric Analysis of Time Series, 2nd ed. (1990) by A.C. Harvey. Philip Allan.

(M) [18] Non-linear Time Series: A Dynamical System Approach (1990) by Howell Tong. Oxford University.

(T) [19] Time Series Techniques for Economists (1990) by T.C. Mills. Cambridge University.

(T) [20] Time Series Theory and Methods, 2nd ed. (1991) by P.J. Brockwell & R.A. Davis. Springer-Verlag.

(M) [21] Nonlinear Dynamic, Chaos and Instability (1991) by W.A. Brock, D. Hsieh & B. LeBaron, MIT Press.

(T) [22] Time Series Models, 2nd ed. (1993) by A.C. Harvey. Harvester/Wheatsheaf.

(E) [23] Handbook of Statistics, Vol.11 (1993): Econometrics (editors: G.P. Patil & C.R. Rao) by W.A. Brock and S.M. Potter, North Holland.

(M) [24] Modelling Nonlinear Economic Relationships (1993) by C.W.J. Granger and T. Teräsvirta. Oxford University.

(T) [25] The Econometric Modelling of Financial Time Series (1993) by T.C. Mills. Cambridge University Press.

(T) [26] Introduction to Time Series and Forecasting (1996) by P.J. Brockwell and R.A. Davis. Springer-Verlag.

(M) [27] Nonlinear Dynamics and Economics (1996) (W.A. Barnett et al. editors) by T. Teräsvirta, Cambridge.

(E) [28] Handbook of Statistics Vol. 14 (1996): Statistical Methods in Finance (editors: G.S. Maddala & C.R. Rao) by W.A. Brock & de Lima. North Holland.

(T) [29] Time Series & Dynamic Models (1997) by C. Gourieroux and A. Monfort, Cambridge.

(M) [30] Asymptotics, Nonparameters and Time Series (1999) (Editor S. Ghosh) by D. Tjøstheim, Marcel-Kekker.

(M) [31] ARCH Models and Financial Applications (1997) by C. Gourieroux. Springer-Verlag.

(E) [32] Encyclopedia of Statistical Sciences Update Volume (1) (1997) by R.A. Stine. Wiley-Interscience.

(M) [33] Nonlinear Time Series Analysis with Application to Foreign Exchange Rate Volatility (1998) by C.M. Hafner. Physica-Verlag.

(E) [34] Handbook of Applied Economic Statistics (1998) (editors, A. Ullah & D. Giles), by T. Teräsvirta. Marcel-Dekker.

(M) [35] Non-Linear Time Series Analysis (1998) by H.Z. An and M. Chen (In Chinese). Shanghai Science and Technology Publishing Co.

(M) [36] Time Series Models for Business and Economic Forecasting (1998) by P.H. Franses. Cambridge University Press.

(T) [37] Probability Theory and Statistical Inference: Econometric Modelling with Observational Data (1999) by A. Spanos, Cambridge University Press.

(M) [38] Asymptotic Theory of Statistical Inference for Time Series (2000) by M. Taniguchi and Y. Kakizawa. Springer-Verlag.

(T) [39] Nonlinear Time Series Models in Empirical Finance (2000) by P.H. Franses and D. Van Dijk. Cambridge.

(T) [40] Econometric Theory (2000) by James Davidson. Blackwell.

(M) [41] Nonlinear Time Series: Nonparametric and Parametric Methods (2003) by J. Fan and Q. Yao. Springer.

(T) [42] Applied Econometric Time Series 2nd ed. (2004) by Walter Enders. Wiley.

(M) [43] Applied Time Series Econometrics (2004) by H. Lütkepohl and M. Krätzig (Editors). Cambridge University Press.

(T) [44] Financial Econometrics: from basics to advanced modelling techniques (2007) by S.T. Rachev, S.Mittnik, F.J. Fabozzi, S.M. Focardi, T. Jasic. Wiley-Finance.

(M) [45] Long-Memory Time Series: Theory and Methods (2007) by Wilfredo Palma. Wiley.

(M) [46] Time Series Analysis (2008) by Hewrik Madsen. Chapman and Hall.

(T) [47] Time Series Analysis with Applications in R, 2nd ed. (2008) by J. Cryer & K.S. Chan. Springer.

(E) [48] Handbook of Financial Time Series (Editors: T.G. Andersen, R.A. Davis, J.- P. Kreiss and T. Mikosch) (2009) by J. Silvennoinen and Teräsvirta.

(4) W.K. LI (1984) On the Autocorrelation Structure and Identification of some Bilinear Time Series Models. *Journal of Time Series Analysis*, **5**, 173-81.

Cited in [38].

(5) W.K. LI (1985) Distribution of Residual Autocorrelations in Multivariate Autoregressive Index Models. *Biometrika*, **72**, 686-688.

Cited in [7].

(6) W.K. LI (1987) The Akaike Information Criterion in Threshold Modelling. Nonlinear Time Series and Signal Processing (editor: R.R. Mohler), Springer Lecture Notes in Control and Information Sciences, 88-96, Springer: New York.

Cited in [18].

(7) W.K. LI and A.I. McLEOD (1986) Fractional Time Series Modelling, *Biometrika*, **73**, 217-221.

Cited in [20], [29], [30] by P.M. Robinson, [41], [45] and

(M) [49] Advances in Econometrics and Modelling (1989) (editor B. Raj) by F. Diebold. Kluwer.

(T) [50] Time Series: Forecasting, Simulation, Applications (1993) by G. Janacek and L. Swift. Ellis Horwood.

(M) [51] Developments in Time Series Analysis (1993) by G. Janacek (editor: T. Subba Rao). Chapman and Hall.

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