**ZHENLIN YANG**

Professor of Economics & Statistics

Lee Kong Chian Fellow

School of Economics

Singapore Management University

## DEGREES

| | |
|---|---|
| 1992 | Ph.D., Statistics, University of Alberta, Canada. |
| | Thesis Title: *Inference Following Box-Cox Transformation* |
| | Supervisor: Peter M. Hooper; Committee Chair: Douglas Wiens |
| 1987 | M.Sc., Applied Statistics, University of Guelph, Canada. |
| 1983 | B.Eng., Metal Materials, Northeastern University, China, 1983. |

## PAST EMPLOYMENT AND POSITION(S)

| | |
|---|---|
| 2015.7–Present | Professor, School of Economics, Singapore Management University. |
| 2006.7–2015.6 | Associate Professor, School of Economics, Singapore Management University. |
| 2002.7–2006.6 | Assistant Professor, School of Economics and Social Sciences, Singapore Management University. |
| 2001.7–2002.6 | Assistant Professor, Department of Economics, National University of Singapore. |
| 1998.4–2001.6 | Assistant Professor, Department of Statistics and Applied Probability, National University of Singapore. |
| 1993.5–1998.3 | Lecturer, Department of Economics and Statistics, National University of Singapore. |
| 1992.9–1993.4 | Visiting Assistant Professor, Department of Mathematics and Statistics, Simon Fraser University. |
| 1992.7–1992.8 | Sessional Instructor, Department of Statistics and Applied Probability, University of Alberta. |

## RESEARCH INTERESTS

- Spatial Econometrics
- Panel Data Models
- Bootstrap methods for Refined Inferences
- Event Time Analysis

## EDITORISL SERVICE

**Co-Editor: Regional Science and Urban Economics, Jan. 2015 – Present.**

**Managing Guest Editor** for "*New Advances in Spatial Econometrics: Interactions Matter*", a Special Issue for Regional Science and Urban Economics, 2016-17.

**Editor** for "*Spatial Econometrics: New Methods and Applications*", a special issue for Regional Science and Urban Economics, 2017-18.

## MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- Member, The Econometric Society
- Member, The Spatial Econometrics Association (SEA)
- Member, The American Statistical Association (ASA)
- Life Member, The International Chinese Statistical Association (ICSA)

## HONORS, AWARDS, ACHIEVEMENTS

| | |
|---|---|
| 2017 | **Lee Kong Chian Fellow** (1/07/2017--30/06/2019) |
| 2015 | **Research Excellence Award**, School of Economics, Singapore Management University. |
| 2015 | **2015 Outstanding Reviewer** *for Computational Statistics and Data Analysis* |
| 2006 | **Lee Kuan Yew Fellow for Research Excellence**, Singapore Management University. |
| 1998 | **Teaching Excellence Award**, 1998, National University of Singapore |
| 1998 | **Teaching Excellence Award**, 1998, Faculty of Arts and Social Sciences, National University of Singapore |

## PUBLICATIONS

*Published articles in refereed journals*

[1] Yang, Z. L. (2017). Unified M-estimation of fixed-effects spatial dynamic models with short panels. ***Journal of Econometrics****, forthcoming.*

[2] Shen, Y. and Yang, Z. L. (2017). Improved likelihood inferences for Weibull regression model. ***Journal of Statistical Computation and Simulation*** **87**, 2349-2371.

[3] Yang, Z. L., Yu, J. H, and Liu, S. F. (2016). Bias correction and refined inferences for fixed effects spatial panel data models. ***Regional Science and Urban Economics*** **61**, 52-72*.*

[4] Desmond, A. F. and Yang, Z. L. (2016). Asymptotically refined score and GOF tests for inverse Gaussian models. ***Journal of Statistical Computation and Simulation*** **86**, 3243-3269.

[5] Su, L. J. and Yang, Z. L. (2016). Asymptotics and bootstrap for random-effects panel data transformation models. ***Econometric Reviews,*** *forthcoming***.** http://dx.doi.org/10.1080/07474938.2015.1122235

[6] Liu, S. F. and Yang, Z. L. (2015). Improved Inferences for Spatial Regression Models. ***Regional Science and Urban Economics*** **55**, 55-67*.*

[7] Liu, S. F. and Yang, Z. L. (2015). Asymptotic distribution and finite-sample bias correction of QML estimators for spatial error dependence Model. ***Econometrics,*** **3**, 376-411.

[8] Liu, S. F. and Yang, Z. L. (2015). Modified QML estimation of spatial autoregressive models with unknown heteroskedasticity and normality. ***Regional Science and Urban Economics*, 52,** 50-70.

[9] Yang, Z. L. (2015). LM tests of spatial dependence based on bootstrap critical values. ***Journal of Econometrics,* 185**, 33-39.

[10] Su, L. J. and Yang, Z. L. (2015). QML estimation of dynamic panel models with spatial errors. ***Journal of Econometrics,* 185**, 230-258.

[11] Yang, Z. L. (2015). A general method for third-order bias and variance correction on a nonlinear estimator (former title: Bias-corrected estimation for spatial autocorrelation). ***Journal of Econometrics*, 186**, 178-200.

[12] Shen, Y. and Yang, Z. L. (2015). Bias-correction for Weibull common shape estimation. ***Journal of Statistical Computation and Simulation,* 85**, 3017-3046.

[13] Baltagi, B. H. and Yang, Z. L. (2013). Standardized LM tests for spatial error dependence in linear or panel regressions. ***Econometrics Journal,* 16**, 103-134.

[14] Baltagi, B. H. and Yang Z. L. (2013). Heteroskedasticity and non-normality robust LM tests of spatial dependence. ***Regional Science and Urban Economics*, 43,** 725-739.

[15] Desmond, A. F. and Yang, Z. L. (2011). Score tests for inverse Gaussian mixture. ***Applied Stochastic Models in Business and Industry,* 27**, 633–648.

[16] Yang, Z. L. and Huang, J. H. (2011). A transformed random effects model with applications. ***Applied Stochastic Models in Business and Industry,* 27**, 222–234.

[17] Yang, Z. L., Gan. L. and Tang F. F. (2010). A study of price evolution in online toy market. ***Economics:*** *The Open Access, Open-Assessment E-Journal, Vol. 3*

[18] Yang, Z. L. (2010). A robust LM test for spatial error components. ***Regional Science and Urban Economics,* 40**, 299-310.

[19] Yang, Z. L. and Tse, Y. K. (2008). Generalized LM tests for functional form and heteroscedasticity. ***Econometrics Journal*, 11**, 349-376.

[20] Yang, Z. L., Wu, E. K. H. and Desmond, A. F. (2008). Inference for general parametric functions in Box-Cox-type transformation models. ***Canadian Journal of Statistics,* 36**, 301-319.

[21] Yang, Z. L. and Lin, K. J. (2007). Improved maximum-likelihood estimation for the common shape of several Weibull distributions. ***Applied Stochastic Models in Business and Industry***, **23**, 373-383.

[22] Yang, Z. L. and Tse, Y. K. (2007). A corrected plug-in method for quantile interval construction through a transformed regression. ***Journal of Business and Economic Statistics***, **25**, 356-376.

[23] Yang, Z. L., Tse, Y. K. and Bai, Z. D. (2007). Statistics with estimated parameters. ***Statistica Sinica***, **17**, 817-837.

[24] Yang Z. L., Xie, M. and Wong, A. C. M. (2007). A unified confidence interval for reliability related Weibull quantities. ***Journal of Statistical Computation and Simulation,* 77**, 365-378.

[25] Yu, J., Yang, Z. L. and Zhang, X. B. (2006). A class of nonlinear stochastic volatility models and its implications on pricing currency options. ***Computational Statistics and Data Analysis*, 51**, 2218-2231.

[26] Yang, Z. L. (2006). A modified family of power transformations. ***Economics Letters*, 92**, 14-19.

[27] Xing, X. L., Yang, Z. L. and Tang, F. F. (2006). A comparison of time-varying online price and price dispersion between multichannel and Dotcom DVD retailers. ***Journal of Interactive Marketing*****, 20**, 3-10.

[28] Yang, Z. L. Li, C. W. and Tse, Y. K. (2006). Functional form and spatial dependence in dynamic panels. ***Economics Letters*****, 91**, 138-145.

[29] Yang, Z. L. and Tse, Y. K. (2006). Modeling the firm-size distribution using Box-Cox heteroscedastic regression. ***Journal of Applied Econometrics,* 21**, 541-653.

[30] Koh, W. T.H. Yang. Z. L. and Zhu, L. J (2006). Lottery rather than waiting-line auction. ***Social Choice and Welfare,* 27,** 289-310*.*

[31] Yang, Z. L. and Tsui, A. K. (2004). Analytically calibrated Box-Cox percentile limits for duration and event-time models. ***Insurance: Mathematics and Economics,* 35**, 649-677*.*

[32] Yang Z. L. and Chen, G. (2004). Tests of transformation in nonlinear regression. ***Economics Letters,* 84**, 391-398.

[33] Xing, X. L., Tang, F. F. and Yang, Z. L. (2004). Pricing Dynamics in the Online Consumer Electronics Market. ***Journal of Product and Brand Management,* 13**, 429-441.

[34] Leung, H. M. Tan, S. L. and Yang, Z. L. (2004). What has luck got to do with economic development? An interpretation of resurgent Asia's growth experience. ***Journal of Policy Modeling*****, 26**, 373-385.

[35] Yang, Z. L. and Abeysinghe, T. (2003). A score test for Box-Cox functional form. ***Economics Letters*****, 79**, 107-115.

[36] Yang, Z. L. and Xie, M. (2003). Efficient estimation of the Weibull shape parameter based on a modified profile likelihood. ***Journal of Statistical Computation and Simulation,* 73**, 115-123.

[37] Yang. Z. L., See, S. P and Xie, M. (2003). Transformation approaches for the construction of Weibull prediction interval. ***Computational Statistics and Data Analysis,* 43**, 357-368.

[38] Yang, Z. L. and Abeysinghe, T. (2002). An explicit variance formula for the Box-Cox functional form estimator. ***Economics Letters,* 76**, 259-265.

[39] Yang. Z. L. (2002). Comment on "Box-Cox transformation in linear models: large sample theory and tests of normality" by Chen, G., Lockhart, R. A. and Stephens, M. A. ***Canadian Journal of Statistics,* 30**, 222-226.

[40] Yang. Z. L. (2002). Median estimation through a regression transformation. ***Canadian Journal of Statistics,* 30**, 235-242.

[41] Yang, Z. L., Xie, M., Kuralmani, V. and Tsui, K.L. (2002). On the performance of geometric chart with estimated control limits. ***Journal of Quality Technology*****, 34**, 448-458.

[42] Yang, Z. L., See, S. P. and Xie, M. (2002). An investigation of transformation-based prediction interval for the Weibull median life. ***Metrika*****, 56**, 19-29.

[43] Yang, Z. L. (2001). Predicting a future median life through a power transformation. ***Lifetime Data Analysis*****, 7**, 305-317.

[44] Yang, Z. L., and Lee, R. T. C. (2001). On the failure rate estimation for the inverse Gaussian distribution. ***Journal of Statistical Computation and Simulation*****, 71**, 201-213.

[45] Xie, M., Yang, Z. L. and Gaudoin, O. (2000). More on the mis-specification of the shape parameter with Weibull-to-exponential transformation. ***Quality and Reliability Engineering International***, **16**, 281-290.

[46] Yang, Z. L. and Xie, M.(2000). Process monitoring for the exponentially distributed Characteristics through an Optimal Normalizing Transformation. ***Journal of Applied Statistics***, **27**, 1050-1063.

[47] Yang, Z. L. (2000). Predictive densities for the lognormal distribution and their applications. ***Microelectronics Reliability***, **40**, 1051-1059.

[48] Yang, Z. L. (2000). A new statistics for regression transformation. ***Test***, **9**, 123-132.

[49] Yang, Z. L. (1999). Maximum likelihood predictive densities for the inverse Gaussian distribution with application to reliability and lifetime predictions. ***Microelectronics Reliability***, **39**, 1413-1421.

[50] Yang, Z. L. (1999). Predicting a future lifetime through Box-Cox transformation. ***Lifetime Data Analysis***, **5**, 265-279.

[51] Yang, Z. L. (1999). Estimating transformation and its effects on Box-Cox *T*-ratio. ***Test***, **8**, 167-190.

[52] Yang, Z. L. (1998). An alternative approximation to the variance of transformation Score. ***Journal of Statistical Computation and Simulation***, **62**, 181-188.

[53] Desmond, A. F. and Yang, Z. L. (1998). A comparison of likelihood and Bayesian inference for the threshold parameter in the inverse Gaussian distribution. ***Communications in Statistics, Theory and Methods***, **27**, 2173-2183.

[54] Yang, Z. L. (1998). On robustness of usual confidence region under transformation misspecification. ***Journal of Statistical Computation and Simulation***, **61**, 175-190.

[55] Hooper, P. M. and Yang, Z. L. (1997). Confidence intervals following Box-Cox transformation. ***Canadian Journal of Statistics***, **25**, 401-416.

[56] Yang, Z. L. (1997). More on the estimation of Box-Cox transformation. ***Communications in Statistics, Simulation and Computation***, **26**, 1063-1074.

[57] Yang, Z. L. (1996). Some asymptotic results on Box-Cox transformation methodology. ***Communications in Statistics, Theory and Methods***, **25**, 403-415.

[58] Desmond, A. F. and Yang, Z. L. (1995). Shortest prediction intervals for the Birnbaum-Saunders distribution. ***Communications in Statistics, Theory and Methods***, **24**, 1383-1401.

*Conference Proceedings & Book Reviews*

[59] Yang, Z. L. (2007). Modelling spatial dependence and social interactions. *Knowledge Hub, Singapore Management University.*

[60] Yu, J. and Yang, Z. L. (2006). A class of nonlinear stochastic volatility models. *Proceedings of the* 5th International Conference on Computational Intelligence in Economics and Finance

[61] Su, L. J. and Yang, Z. L. (2006). QML estimation of dynamic panel data models with spatial errors. *Proceedings of the 3rd Singapore Econometrics Study Group Meeting.*

[62] Yang, Z. L. (2005). Review of “Theory of Regular Economies, by Ryo Nagata, 2004, World Scientific Publishing, Singapore”, *The Singapore Economic Review*, 50, 289-291.

[63] Yang, Z. L., Prediction intervals for the inverse Gaussian distribution with Applications to Lifetime Data. *Proceedings of the International Workshop on RELIABILITY MODELLING AND ANALYSIS – From Theory to Practice, 1998.* M. Xie and D. N. P. Murthy edited, p81-88. *National University of Singapore.*

## COMPLETED WORKS

### *Articles in the review process:*

[64] Yang, Z. L. (2016). Joint tests for dynamic and spatial effects in short panel data models with fixed effects.

[65] Yang, Z. L. (2016). Bootstrap LM tests for higher order spatial effects in spatial linear regression models. Under revision for Empirical Economics.

### *Unpublished working papers:*

[66] Yang, Z. L. and Shen, Y. (2011). A simple and reliable method of inference for spatial autoregressive model. (New version: 2014).

[67] Yang Z. L., Xing, X. L., Babin, B. and Tang F. F. (2008). Price evolution in online video and DVD markets.

[68] Su, L. J. and Yang, Z. L. (2007). Instrumental variable quantile estimation of spatial autoregressive models. (New versions: 2011, 2012).

[69] Yang, Z. L. (2006). Joint modelling and testing for local and global spatial externalities.

[70] Yang, Z. L. (2005). Quasi-maximum likelihood estimation of spatial panel data regression.

[71] Xing, X. L. and Yang Z. L. (2005). Determinants of job turnover intentions: evidence from Singapore.

[72] Yang, Z. L. (2004). Trans-Normal Distribution: A Flexible Model for Duration and Event-Time Data.

[73] Yang Z. L. (2003). Fiducial predictive densities and econometric duration analysis.

[74] Yang Z. L. (2002). Monitoring process variability with symmetric control limits.

[75] Yang Z. L. (2000). On the proper use of Box-Cox transformation method: a note on a Taguchi case study.

## WORK IN PROGRESS:

[76] Yang, Z. L. (2016). Initial-condition free inferences for fixed effects dynamic panel data models with non-spherical errors.

[77] Desmond, A. F. and Yang, Z. L. (2016). Confidence limits for cure rates in first hitting time regression models.

[78] Pirotte, A. and Yang, Z. L. (2016). Diagnostic tests for homoscedasticity in spatial cross-sectional or panel models.

## RESEARCH GRANTS

(1) Inferences for Spatial Dynamic Panel Data Models with Applications. Singapore Management University, 01.10.2016-30.09.2018.

(2) Joint Tests for Dynamic and Spatial Effects in Panel Data Models with Fixed Effects. Singapore Management University, 08/2014-07/2015.

(3) Unified Estimation of Dynamic Models with Short Panels. Singapore Management University, 03/2013-02/2014.

(4) Heteroscedasticity and Non-normality Robust LM Tests of Spatial Dependence. Singapore Management University, 11/2011-12/2012.

(5) Tests of Spatial Effects based on Bootstrapped Critical Values. Singapore Management University, 11/2010-10/2011.

(6) Bias-Corrected Estimation for Spatial Autocorrelation. Singapore Management University, 11/2009-10/2010.

(7) Robust LM Tests for Spatial Error Dependence. Singapore Management University, 03/2008–10/2009.

(8) Bootstrap Estimate of Variance-Covariance Matrix for Box-Cox Type Panel Data Models. Singapore Management University, 11/2007-02/2008.

(9) Quantile Regression with Flexible Functional Form Transformations. Singapore Management University, 10/2006-09/2007.

(10) On Joint Modelling and Testing for Local and Global Spatial Externalities Based on Panel Data. Singapore Management University, 10/2005-09/2006.

(11) Bounds on Event Probabilities for Duration and Lifetime Models. Singapore Management University, 10/2004-09/2005.

(12) Analysis of Price, Price Dispersion and Market Dynamics in Online Markets Using Panel Data (with J. H. Huang). Wharton-SMU Research Center, Singapore Management University, 01/2004-31/2004.

(13) Functional Panel Data Regression with Spatial Error Correlation (with T. S. Tse). Singapore Management University, 01/2004-12/2004.

(14) Data Transformation and High-Frequency Data: Some Issues in Econometric and Financial Modeling (with T. S. Tse). Singapore Management University, 01/2003-12/2003.

(15) Time Series Analysis to Determine the Inter-relationship between Vectorial, Environmental and Epidemiological Factors in the Transmission of Dengue for the Formulation of Forecasting Models, Ministry of Environment, Singapore, 2001-2002.

(16) Extended Linear Modelling for Survival and Economic Data (with Biman Chakraborty and Y. K. N. Truong). National University of Singapore, 1998-2001.

(17) Reliability Analysis by using Degradation Data (with Z. H. Chen). National University of Singapore, 2001–2003.

## CONFERENCE PRESENTATIONS, INVITED TALKS & DISCUSSIONS

1. Bootstrap LM tests for higher order spatial effects in spatial linear regression models. *Contributed talk at the XI World Conference of the Spatial Econometrics Association, Singapore, June 13-15, 2017.*
2. Discussion on “Obtaining Spatial Data Through Attribute Sampling – A New Method to Identify Rare Events When There is No Data, Qiam Guo, University of London.” *Invited discussion at the XI World Conference of the Spatial Econometrics Association, Singapore, June 13-15, 2017.*

3. Discussion on “Can lending constraints cool a housing boom? Lu Han, University of Toronto”. *Invited discussion at the IRES Symposium” Housing Market and the Macro Economy, National University of Singapore, 19-20, May, 2017.*
4. Joint M-tests for dynamic and spatial effects in short panel data models with fixed effects and unknown heteroskedasticity. *Invited talk at the 2nd Econometrics Workshop at the Chinese University of Hong Kong, 29 April 2017.*
5. Unified M-estimation of fixed effects spatial dynamic models with short panels. *Invited talk at Northeastern University, China, 12 Dec., 2016.*
6. Initial-Condition Free Estimation of Fixed Effects Dynamic Panel Data Models with Non-Spherical Errors. *Contributed talk at The 6th Shanghai Econometrics Workshop, Shanghai, China, June 22-23, 2026.*
7. Initial-Condition Free Estimation of Fixed Effects Dynamic Panel Data Models with Non-Spherical Errors. *Contributed talk at the X World Conference of the Spatial Econometrics Association, Rome, Italy, June 13-15, 2016.*
8. Discussion on “Testing for serial correlation in spatial panels, by Giovanni Millo”. *Invited discussion at the X World Conference of the Spatial Econometrics Association, Rome, Italy, June 13-15, 2016.*
9. Unified M-estimation of fixed effects spatial dynamic models with short panels. *Invited talk at CRED, University of Pantheon-Assas (Paris II), 6 June 2016.*
10. Joint tests for dynamic and spatial effects in short panel data models with fixed effects. *Contributed talk at the 15th International Workshop on Spatial Econometrics and Statistics, Orleans, 27-28 May 2016.*
11. Discussion on “Dynamic Spatial Panel Data Model with Spatial Moving Average Errors, By Badi Baltagi, Bernard Fingleton and Alain Pirotte”. *Invited discussion at the 15th International Workshop on Spatial Econometrics and Statistics, Orleans, 27-28 May 2016.*
12. Initial-Condition Free Estimation of Fixed Effects Dynamic Panel Data Models with Non-Spherical Errors. *Contributed talk at the 2016 Tripartite Conference (Hiroshima University, Hiroshima University of Economics, and Singapore Management University)*.
13. Improved Inferences for Spatial Regression Models. *Contributed talk at the 14th International Workshop on Spatial Econometrics and Statistics, Paris, 27-28 May 2015.*
14. Discussion on “Non-Nested Testing of Spatial Correlation, by Miguel A. Delgado and Peter M. Robinson”. *Invited discussion at the 14th International Workshop on Spatial Econometrics and Statistics, Paris, 27-28 May 2015.*
15. Unified M-estimation of fixed effects spatial dynamic models with short panels. *Invited talk at Shanghai University of Finance and Economics, China, 6 May 2015.*
16. LM tests of spatial dependence based on bootstrap critical values. *Invited talk at University of Guelph, Canada, 22 October 2014.*
17. Unified M-estimation of fixed effects spatial dynamic models with short panels. *Contributed talk at The VIII World Conference of the Spatial Econometrics Association, Zurich, 11-13 June 2014.*
18. Unified QML estimation of dynamic models with short panels. *Contributed talk at the Asia Meeting of the Econometric Society, Singapore, 2-4 August 2013.*
19. QML estimation of dynamic panel data models with spatial errors. *Contributed talk at the 18th International Panel Data Conference, Paris, 5-6 July 2012.*

20. LM tests of spatial dependence based on bootstrap critical values. *Contributed talk at Tsinghua International Conference for Econometrics, Beijing, 15-16 May 2012.*
21. A general method for third-order bias and variance corrections for a nonlinear parameter. *Contributed talk at SETA 2012, Shanghai, 19-21 May 2012.*
22. Standardized LM tests for spatial error dependence in linear or panel regressions*. Contributed Talk at the 2011 Asian Meeting of the Econometrics Society, Seoul, 11-13 August 2011.*
23. LM tests of spatial dependence based on bootstrap critical values*. Contributed talk at the Vth World Conference of the Spatial Econometrics Association, Toulouse, 6-8 July 2011.*
24. Discussion on: "On the application of bootstrap methods in spatial econometric models, by Gianfranco Piras and Lozano-Gracia Nancy"*. Invited Discussion at the Vth World Conference of the Spatial Econometrics Association, Toulouse, 6-8 July 2011.*
25. A simple and robust method of inference for spatial Autocorrelation. *Invited Seminar at the Division of Economics, Nanyang Technological University, Singapore, 3 November 2010.*
26. Bias-corrected estimation for spatial autocorrelation. *Contributed talk at the IVth World Conference of the Spatial Econometrics Association*, *Chicago, 9-12 June 2010.*
27. Discussion on "Pseudo GLS regression estimation with spatial data, by Cuicui Liu". *Invited discussion at the IVth World Conference of the Spatial Econometrics Association*, *Chicago, 9-12 June 2010.*
28. Bias-corrected estimation for spatial autocorrelation. *Invited Seminar at the School of Economics, Singapore Management University, 23 October 2009*.
29. Tests for spatial dependence under distributional misspecifications. *Contributed talk at the II World Conference of the Spatial Econometrics Association, New York, 17-19 Nov 2008.*
30. Discussion on "More efficient estimation of the spatial error components model, by Fernando Carriazo and Edward Coulson." *Invited discussion at the II World Conference of the Spatial Econometrics Association, New York, 17-19 Nov 2008.*
31. Instrumental variable quantile estimation of spatial autoregressive models (with Liangjun Su). *Contributed talk at the Far Eastern and South Asian Meeting of Econometric Society, 16-18 July 2008; Invited talk at the Conference in Honor or Professor Bai Zhidong on his 65th Birthday, 20 July 2008*
32. Asymptotics and bootstrap for transformed panel data regressions (with Liangjun Su). *Contributed talk at The 14th International Conference on Panel Data, WISE, Xiamen University, China, 16-18 July 2007.*
33. Instrumental variable quantile estimation of spatial autoregressive Models (with Liangjun Su). *Contributed talk at The 1st World Conference of the Spatial Econometrics Association, University of Cambridge, 11-14 July 2007.*
34. Spatial Dependence, Functional-form Selection, and Dynamic Effects in Panel Models. *Invited talks at Department of Economics, Korea University, 21 May 2007; and School of Economics, Yonsei University, South Korea, 22 May 2007.*
35. Asymptotics and Bootstrap for Transformed Panel Data Regressions. *Invited talk at the Department of Statistics, Korea University, 18 May 2007.*

*36.* A Transformed Random Effects Model with Applications (with Jianhua Huang). *Contributed talk at The Third Symposium on Econometric Theory and Applications, Hong Kong University of Science and Technology, 13-15 April 2007.*

37. A Transformed Random Effects Model with Applications (with Jianhua Huang). *Invited talk at the Division of Economics, Nanyang Technological University, Singapore, 31 January 2007.*

38. Quasi-maximum likelihood estimation for spatial panel data regressions. *Contributed talk at the Far Eastern Meeting of The Econometric Society 2006 (FEMES 2006), Tsinghua University, Beijing, China, July 10-12, 2006*.

39. QML Estimation of Dynamic Panel Data Models with Spatial Errors (with Liangjun Su). *Contributed talk at the Singapore Econometric Study Group (SESG) Meeting, Singapore Management University, 8 July 2006.*

40. Joint Modeliing and Testing for Local and Global Spatial Externalities. *Contributed talk at the International Workshop on Spatial Statistics and Econometrics, Luiss Business School, Rome, Italy, 25-27 May 2006.*

41. Discussion on "Externalities and the industry life cycle: A long-term perspective on regional growth in Great Britain, By F, M, H. Neffke, F. G., Van Oot, and R. A. Boschma". *Invited discussion at the International Workshop on Spatial Statistics and Econometrics, Luiss Business School, Rome, Italy, 25-27 May 2006.*

42. Quasi-maximum likelihood estimation for spatial panel data regressions. *Contributed talk at the Spatial Econometrics Workshop, Kiel Institute for World Economics, Kiel, Germany, 8-9 April 2005.*

43. Discussion on "A spatial error components model with both local and global externalities, by V. D. Giacinto". *Invited discussion at the Spatial Econometrics Workshop, Kiel Institute for World Economics, Kiel, Germany, 8-9 April 2005.*

44. Statistics with estimated parameters (with Y. K. Tse and Z. D. Bai). *Contributed talk at The 6th ICSA International Conference, 21-23 July 2004, Singapore.*

45. Modeling firm-size distribution using Box-Cox heteroscedastic regression (with Y. K. Tse). *Invited talk at the Department of Econometrics and Business Statistics, Monash University, 13 July 2004.*

46. Tests of functional form and heteroscedasticity (with Y. K. Tse). *Contributed paper at the Econometric Society Australasian Meeting (ESAM2004), Melbourne, 7-9 July 2004.*

47. On the asymptotic effect of substituting estimators for nuisance parameters in inferential statistics (with Y. K. Tse and Z. D. Bai). *Invited talk at the Department of Statistics, the Chinese University of Hong Kong, 28 April 2004.*

48. Score tests for inverse Gaussian mixture. *Contributed talk at the Bernoulli Society East Asian and Pacific Regional (EAPR) Conference 2003, Hong Kong, 18-20 December 2003.*

49. Simple inference methods based on Weibull to exponential transformation. *Invited paper at the 5th ICSA International Conference*, *Hong Kong, 16–19 August 2001.*

50. An *S*-chart based on an optimal normalizing transformation. *Invited paper at the International Conference on Statistics in the 21st Century, University of Maine, USA, 29 June - 1 July 2000.*

51. Predicting a future lifetime through Box-Cox transformation. *Invited paper at the 4th ICSA International Conference*, *Kunming, China, 19-21 August 1998.*

52. Box-Cox transformation and its role in Taguchi method. *Invited Paper at Industrial Statistics Workshop, National University of Singapore, 17 February 1997.*

**EDITORIAL SERVICES - Reviewer**:

**2015 Outstanding Reviewer** *for Computational Statistics and Data Analysis*

***Economics & Regional Science***

- *Journal of Econometrics*
- *Journal of Business and Economic Statistics*
- *Journal of Applied Econometrics*
- *Econometrics Journal*
- *Econometric Reviews*
- *Economics Letters*
- *International Economics Review*
- *Journal of European Economic Association*
- *International Journal of Production Economics*
- *Singapore Economic Review*
- *Journal of International Regional Science Review*
- *Regional Science and Urban Economics*
- *Journal of Regional Science*
- *Papers in Regional Science*
- *International Regional Science Review*
- *Computational Economics*
- *Spatial Economic Analysis*
- *Economics Bulletin*
- *Journal of Interactive Marketing*

***Statistics and Probability:***

- *The Statistician*
- *Journal of the American Statistical Association*
- *Canadian Journal of Statistics*
- *Computational Statistics and Data Analysis*
- *IEEE Transactions on Reliability*
- *International Journal of Reliability*
- *Quality and Safety Engineering*
- *Naval Research Logistics*
- *Communications in Statistics: Theory and Methods*
- *Bernoulli*
- *Journal of Applied Statistics*
- *Journal of Nonparametric Statistics*
- *Economic Quality Control*
- *Applied Stochastic Models for Business and Industry,*
- *British Journal of Mathematics and Computer Science*

**PROFESSIONAL ACTIVITIES AND SERVICES**

**Services at Singapore Management University**

- Member of Curriculum Committee, School of Economics, 2015-Present.
- School representative to SMU Library Advisory Committee, 2012–Present.
- Course coordinator for STAT151, Term I, 2012-2013.
- Chair, Member, and Co-Chair of Seminar Series and Working Paper Series, School of Economics, 2007-2012.
- Chair of Local Organizing Committee, Far Eastern Meeting of Econometric Society 2008.
- Member of the Executive Committee, University Faculty Senate, 2007–2009.
- Member, Research Excellence Committee, School of Economics, 2007–2008.
- Member, Faculty Recruiting Committee for Economics and Statistics, 2005–06.
- Member, Faculty IT Advisory Board, 07/2002–03/2005.
- Course Coordinator, Introductory Statistics (Term II, 2003–2005, 2010–2011).
- Member of the School Reading Committee (SRC) and the School Evaluation Committee (SEC) for various cases.
- Member of SRC and SEC for School of Social Sciences, and School of Information System.

**Supervision of Graduate Students:**

- Supervisor for PhD student: Liu Shew Fan, June 2012 – June 2016.
- Supervisor for PhD student: Li Liyao, June 2016 – Present.
- Supervisor for PhD student: Xu Yuhong, June 2016 – Present.
- Member of a PhD thesis committee
- Member of Several Master Thesis Committee

**Conference Organization**:

- Member of the program committee: The VII World Conference of the Spatial Econometric Society,10–12 July 2013, Washington, DC.
- Chair of the local organizing committee: Asia Meeting of the Econometric Society, 2008, Singapore.

**External Examiner for:**

- PhD thesis, Dept. of Statistics and Applied Probability, National University of Singapore, 2014.
- PhD thesis, Dept. of Industrial and System Engineering, National University of Singapore, 2009.
- PhD thesis, Dept. of Industrial and System Engineering, National University of Singapore, 2008.
- PhD thesis, Dept. of Econometrics and Business Statistics, Monash University, Australia, 2007.
- PhD Thesis, Dept. of Industrial and System Engineering, National University of Singapore, 1998.

- Being supervisor and examiner for a number of Master students

**Academic Visits**:

- CRED, University of Pantheon-Assas (Paris II), May 22 – 28, 2017.
- CRED, University of Pantheon-Assas (Paris II), May 30 – June 10, 2016.
- Dept. of Mathematics and Statistics, University of Guelph, Canada, Oct. 2014.
- Dept. of Statistics, Korea University, May 2007.
- Dept. of Econometrics and Business Statistics, Monash University, Australia, July 2004.
- Dept. of Statistics, Chinese U. of Hong Kong, Hong Kong, China, April 2004.
- Dept. of Marketing, Chinese U. of Hong Kong, Hong Kong, China, Feb. 2004.
- Dept. of Marketing, Chinese U. of Hong Kong, Hong Kong, China, Dec. 2003.
- Dept. of Mathematics and Statistics, University of Guelph, Canada, Sept.-Oct. 2003.

## UNIVERSITY COURSES TAUGHT (UNDERGRADUATE & GRADUATE)

- STAT151 Introduction to Statistical Theory, Term II, 2016–2017 (2)*
- ECON734 Spatial Econometrics, Term I, 2016 – 2017.
- STAT151 Introduction to Statistical Theory, Term II, 2015–2016 (2)*
- STAT151 Introduction to Statistical Theory, Term I, 2015–2016 (2)*
- STAT101 Introductory Statistics, Term I, 2015–2016 (1)*
- STAT151 Introduction to Statistical Theory, Term II, 2014–2015 (2)*
- STAT151 Introduction to Statistical Theory, Term I, 2013–2014 (4)*
- STAT312 Applied Regression Methods, Term II, 2012–2013 (1)
- STAT151 Introduction to Statistical Theory, Term I, 2012–2013 (4)
- STAT151 Introduction to Statistical Theory, Term II, 2011–2012 (2)
- STAT306 Applied Stochastic Models, Term I, 2011–2012 (1)
- STAT312: Applied Regression Methods, Term II, 2010–2011 (1)
- STAT101: Introductory Statistics, Term II, 2010–2011 (1)
- STAT151: Introduction to Statistical Theory, Term II, 2009–2010 (3)
- STAT306: Applied Stochastic Models, Term II, 2009–2010 (1)
- STAT312: Applied Regression Methods, Term I, 2009–2010 (1)
- STAT151: Introduction to Statistical Theory, Term II, 2008–2009 (2)**
- STAT312: Applied Regression Methods, Term II, 2008–2009 (1)
- STAT102: Introductory Statistics B, Term II, 2007–2008 (3)
- STAT312: Applied Statistical Methods, Term I, 2007–2008 (1)
- STAT101: Introductory Statistics A (2002 – 2007, 1st year students, 5 times)

- STAT102: Introductory Statistics B (2002 – 2007, 1st year students, 8 times)

*The number in parentheses indicates the number of sections.
**I was on sabbatical in Term I, 2008–2009, with teaching load for the year 2.

## EXECUTIVE EDUCATION AND PROFESSIONAL PROGRAMS TAUGHT

- STAT611: Statistics for Applied Economists: Regression Models, Term I, 2009–2010
  (For Master of Applied Economics)
- STAT611: Statistics for Applied Economists: Regression Models, Term I, 2008–2009
  (For Master of Applied Economics)
- Probability and Statistics – training course offered to Government of Singapore Investment Corporation Pte Ltd, August 2006.

## CONTACT INFORMATION

Tel.: 65-6828 0852

Fax: 65-6828 0833

E-mail: zlyang@smu.edu.sg

web: http://www.mysmu.edu/faculty/zlyang/

Address: School of Economics, Singapore Management University
90 Stamford Road, Singapore 178903.