

<u>Yiu Lim Lui</u> School of Economics, Singapore Management University <u>https://allenlui.weebly.com/</u> <u>yl.lui.2015@phdecons.smu.edu.sg</u>

Contact Information

School of Economics Singapore Management University 90 Stamford Road Singapore 178903, Republic of Singapore Cell: +65 90539862

Personal Information:

Date of Birthday: 3rd December 1990 Gender: Male Citizenship: Hong Kong SAR, China

Undergraduate Studies:

BBA, Applied Economics, First Class Honours, Hong Kong Baptist University, 2012

Masters Level Work:

Master of Economics, University of Hong Kong, 2014

Graduate Studies:

Singapore Management University, 2015 to present Thesis Title: "Three Essays in Time Series Econometrics" Expected Completion Date: June 2020

Thesis Committee and References:

Jun Yu (advisor)

Lee Kong Chian Professor of Economics and Finance School of Economics Lee Kong Chian School of Business Singapore Management University Phone: +65 6828 0858 Email: yujun@smu.edu.sg

Thomas J. Sargent

Professor of Economics New York University Senior Fellow Hoover Institution Stanford University Phone: +01 (212) 998-8900 Email: thomas.sargent@nyu.edu

Peter C.B. Phillips

Sterling Professor of Economics & Professor of Statistics Yale University Phone: +01 (203) 432-3695 Email: <u>peter.phillips@yale.edu</u>

Teaching and Research Fields:

Primary fields: Time Series Econometrics, Econometric Theory, Financial Econometrics Secondary fields: Applied Econometrics, Forecasting

Teaching Experience:

Instructor		
2018: STAT	101 Introductory Statistics (Fall semester)	
Teachi	ng Evaluation Score: 5.23/7 (under "Good" category in SMU's spectrum)	
Teaching assistant		
2019:	COR 2100 Economics and Society (previously named as Principle of Economics)	
	ECON240 Family and the Society: Economic Theories and Practices	
2016-2018:	ECON102 Intermediate Macroeconomics	
Research Experience:		

2014-2015	Research Assistant, Hong Kong Baptist University
2014	Research Assistant, The University of Hong Kong
2012-2013	Research Assistant, Hong Kong Baptist University

Conference and Seminar Presentations:

2019	Princeton-QUT-SJTU-SMU Conference on Econometrics, Singapore Management
	University, Singapore
	The China Meeting of Econometric Society, Jinan University, Guangzhou, China
	The Asian Meeting of Econometric Society, Xiamen University, Xiamen, China
	SH3 Conference on Econometrics, Singapore Management University, Singapore
2018	The 2018 HU-HUE-SMU Tripartite Conference, Singapore Management University,
	Singapore

Honors, Scholarships, and Fellowships:

2019-2020	Presidential Doctoral Fellowship, Singapore Management University
2015-2019	Graduate Full Scholarship (Ph.D. Program), Ministry of Education, Singapore
2012	Beta Gamma Sigma Lifetime Membership, Hong Kong Baptist University
2012	Mr. Lui Ming Fong Memorial Scholarship, Hong Kong Baptist University
2012	HK Electric Scholarship, Hong Kong Baptist University

Research Papers:

"Testing for Rational Bubbles under Strongly Dependent Errors" (Job Market Paper)

Abstract: A heteroskedasticity and autocorrection robust (HAR) test statistic is proposed to detect the existence of rational bubbles in financial assets when errors are strongly dependent. The asymptotic theory is developed. Unlike the conventional test statistics which lead to a too large type I error under strongly dependent errors, the new test does not suffer from the same size problem. Moreover, the new test statistic can consistently time stamp the origination date and the termination date of a rational bubble. Monte Carlo studies are conducted to check the finite sample performance of the proposed test for the purpose of bubble detection and for the purpose of estimating the bubble origination date and termination date. An empirical application to S&P 500 index highlights the usefulness of the proposed test statistic.

"Mild-explosive Autoregression with Anti-persistent Errors" with Weilin Xiao and Jun Yu

(R&R at Oxford Bulletin of Economics and Statistics)

Abstract: This paper develops a sequential limit theory for the autoregressive parameter when antipersistent errors are in a mildly explosive model. It is shown that the Cauchy asymptotic theory remains valid for the least squares (LS) estimator in the model without intercept or with an asymptotically negligible intercept. Monte Carlo studies examine the finite sample performance of the limiting distribution. An empirical study of a rational bubble in NASDAQ highlights the usefulness of the model and the new limit theory.

"The Grid Bootstrap for Continuous Time Models" with Weilin Xiao and Jun Yu

Abstract: This paper considers the grid bootstrap for constructing confidence intervals for the persistence parameter in a class of continuous-time models driven by a L'evy process. Its asymptotic validity is discussed under the assumption that the sampling interval (h) shrinks to zero, the time span (N) goes to infinity or both. Its improvement over the infill asymptotic theory is achieved by expanding the coefficient–based statistic around its in-fill asymptotic distribution which is non-pivotal and depends on the initial condition. Monte Carlo studies show that the grid bootstrap method performs better than the in-fill asymptotic theory. Empirical applications to U.S. interest rate data highlight differences between the bootstrap confidence intervals and the confidence intervals obtained from the in-fill and long-span asymptotic distributions.

Computer Skills:

Matlab, SAS, R, LaTex, Stata, Eviews

Languages:

English (Fluent), Mandarin (Fluent), Cantonese (Native)