# Yu-Chin Hsu

(許育進)

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# PERSONAL INFORMATION

Gender: Male

Date of Birth: 10/02/1978 Citizenship: Taiwan

## **EMPLOYMENT**

Associate Research Fellow, Institute of Economics, Academia Sinica,

November 2014 -- present

Assistant Research Fellow, Institute of Economics, Academia Sinica,

August 2012 – November 2014

Assistant Professor, Department of Economics, University of Missouri at Columbia, September 2010 -- May 2012

# **EDUCATION**

Ph.D.	Economics, University of Texas at Austin	May 2010
	<b>Dissertation:</b> Three Essays on Hypotheses Testing Involving Inequality Constraints	
	Committee Chair: Stephen G. Donald	
M.S.	Economics, University of Texas at Austin	May 2006
M.A.	Economics, National Taiwan University, Taipei, Taiwan	May 2002
B.S.	Mathematics, National Taiwan University, Taipei, Taiwan	May 2000

## FIELDS OF SPECIALIZATION

Econometric theory

# FELLOWSHIPS, HONORS, AND AWARDS

TWAS Young Affiliate, The World Academy of Sciences	2016		
Fubon Paper Award, International Conference of Taiwan Finance Association			
"Testing Cross-Sectional Stock Returns Predictability without Data Snooping Bias"			
(shared with Kendro Vincent)	2016		
Junior Research Investigators Award, Academia Sinica	2015		
Career Development Award, Academia Sinica	2015-2019		
Ministry of Science and Technology Wu Ta-Yu Memorial Awa	ard 2014		
Young Faculty Award and Scholarship, (5-year term), Foundation for the Advancement			
of Outstanding Scholarship, Taiwan	2012-2017		
Gordon Fellowship in Institutional Economics	Fall 2008, Spring 2009		
Hale Fellowship	Summer 2007, 2008		
Murray S. Johnson Fellowship in Economics	Summer 2006, 2008, 2009		

## **PUBLICATIONS**

- 1. "Change-point Estimation of Nonstationary I(d) Process," *Economics Letters*, 98, pp. 115-121, 2008 (joint with Chung-Ming Kuan).
- 2. "Assessing Value at Risk with CARE, the Conditional AutoRegressive Expectile Models," *Journal of Econometrics*, 150, pp. 261-270, 2009 (joint with Chung-Ming Kuan and Jin-Huei Yeh).
- 3. "Testing the Predictive Ability of Technical Analysis Using A New Stepwise Test without Data Snooping Bias," *Journal of Empirical Finance*, 17, pp. 471-484, 2010 (joint with Po-Hsuan Hsu and Chung-Ming Kuan).
- 4. "A New Test for Linear Inequality Constraints When the Variance Covariance Matrix Depends on the Unknown Parameters," *Economics Letters*, 113, pp. 241-243, 2011 (joint with Stephen G. Donald).
- 5. "Incorporating Covariates in the Measurement of Welfare and Inequality: Methods and Applications," *Econometrics Journal*, 15, pp. C1-C30, 2012 (joint with Stephen G. Donald and Garry F. Barrett).
- 6. "Cyclical Co-movement between Output, the Price Level, and Inflation," in Dek Terrell, Daniel Millimet (ed.) *30th Anniversary Edition (Advances in Econometrics, Volume 30)*, Emerald Group Publishing Limited, pp. 359-384, 2012 (joint with Joseph H. Haslag).
- 7. "Estimation and Inference for Distribution Functions and Quantile Functions in Treatment Effect Models," *Journal of Econometrics*, 178, pp. 383-397, 2014 (joint with Stephen G. Donald).
  - A previous version was circulated under the title "Testing for Stochastic Dominance in Treatment Effects."
- 8. "Testing Over-Identifying Restrictions without Consistent Estimation of the Asymptotic Covariance Matrix," *Journal of Econometrics*, 181, pp. 181-193, 2014 (joint with Wei-Ming Lee and Chung-Ming Kuan).
- 9. "Testing the Unconfoundedness Assumption via Inverse Probability Weighted Estimators of (L)ATT," *Journal of Business and Economic Statistics*, 32, pp. 395-415, 2014 (joint with Stephen G. Donald and Robert P. Lieli).

  This paper contains partial results of a paper which was previously circulated under the title "Inverse Propensity Score Weighted Estimation of Local Average Treatment Effects and a Test of the Unconfoudedness Assumption."
- 10. "A Generalized Stepwise Procedure with Improved Power for Multiple Inequalities Testing," *Journal of Financial Econometrics*, 12, pp. 730-755, 2014 (joint with Chung-Ming Kuan and Meng-Feng Yen).
- 11. "Inverse probability Weighted Estimation of Local Average Treatment Effects: A Higher Order MSE Expansions," *Statistics and Probability Letters*, 95, pp. 132-138, 2014 (joint with Stephen

- G. Donald and Robert P. Lieli).
- This paper contains partial results of a paper which was previously circulated under the title "Inverse Propensity Score Weighted Estimation of Local Average Treatment Effects and a Test of the Unconfoudedness Assumption."
- 12. "Robust Hypothesis Tests for M-Estimators with Possibly Non-differentiable Estimating Functions," *Econometrics Journal*, 18, pp. 95-116, 2015 (joint with Wei-Ming Lee and Chung-Ming Kuan).
- 13. "Trend Definition or Holding Strategy: What Determines the Profitability of Candlestick Technical Trading Strategies?" **Journal of Banking and Finance**, 61, pp. 172-183, 2015 (joint with Tsung-Hsun Lu and Yi-Chi Chen).
- 14. "Estimating Conditional Average Treatment Effects," *Journal of Business and Economic Statistics*, 33, pp. 485-505, 2015 (joint with Jason Abrevaya and Robert P. Lieli).
- 15. "Improving the Power of Tests of Stochastic Dominance," *Econometric Reviews*, 35, pp. 553-585, 2016 (joint with Stephen G. Donald).
- 16. "Consistent Tests for Poverty Dominance Relations," *Journal of Econometrics*, 191, pp. 360-373, 2016 (joint with Garry F. Barrett and Stephen G. Donald).
- 17. "Consistent Tests for Conditional Treatment Effects," forthcoming in *Econometrics Journal*.

#### WORKING PAPERS

- 1. "Estimation of Partial Effects in Non-linear Panel Data Models," (joint with Jason Abrevaya).
- 2. "Model Selection Tests for Conditional Moment Restriction Models," (joint with Xiaoxia Shi).
- 3. "A Stochastic Frontier Model with Endogenous Treatment Status and Mediator," (joint with Yi-Ting Chen and Hung-Jen Wang).
- 4. "Distribution and Quantile Structural Functions in Treatment Effect Models: Applications to Smoking Effects on Wages," (joint with Kamhon Kan and Tsung-Chih Lai).
- 5. "Estimation and Inference for Distribution Functions and Quantile Functions in Endogenous Treatment Effect Models," (joint with Tsung-Chih Lai and Robert P. Lieli).
- 6. "Testing for Treatment Effect Heterogeneity in Regression Discontinuity Design," (joint with Shu Shen).
- 7. "Multiplier Bootstrap for Empirical Processes."
- 8. "Can Investing in Hedge Funds Improve Efficiency for Economically Important Investors?" (joint with Rachel J. Huang, Larry Y. Tzeng, Christine W. Wang).
- 9. "Using the Estimated AUC to Test the Adequacy of Binary Predictors," (joint with Robert P. Lieli).

- 10. "The Null Distribution of the Empirical AUC for Classifiers with Estimated Parameters: a Special Case," (joint with Robert P. Lieli).
- 11. "Testing Generalized Regression Monotonicity," (joint with Chu-An Liu and Xiaoxia Shi).
- 12. "Analyzing the Performance of Multi-Factor Investment Strategies under Multiple Testing Framework," (joint with Hsiou-Wei Lin and Kendro Vincent).
- 13. "Testing Unobserved Heterogeneity of Individual Treatment Effects with Endogenous Treatment," (joint with Ta-Cheng Huang and Haiqing Xu).

### **WORK IN PROGRESS**

- 1. "Inference for ROC Curves Based on Estimated Predictive Indices," (joint with Robert P. Lieli).
- 2. "Forecasting Treatment Effects," (joint with Tsung-Chih Lai and Robert P. Lieli).
- 3. "Nonparametric Estimation of Direct and Indirect Effects Based on Inverse Probability Weighting," (joint with Martin Huber and Tsung-Chih Lai).
- 4. "Nonparametric Inference for Partially Identified Parameters in Moment Inequality Models," (joint with Yuanyuan Wan).
- 5. "Expectile Curves without Crossing," (joint with Mengmeng Guo and Zaichao Du).
- 6. "Two-Step Series Estimation of Semiparametric Model and Specification Test with Generated Regressors," (joint with Jen-Che Liao and Eric S. Lin).
- 7. "Direct and Indirect Treatment Effects in Regression Discontinuity Models," (joint with Ying-Ying Lee and Shu Shen).
- 8. "Lack of Identification Diagnostics in GMM Contexts," (joint with Stephen G. Donald and Shu Shen).
- 9. "Testing Cross-Sectional Stock Returns Predictability without Data Snooping Bias," (joint with Kendro Vincent).
- 10. "Internally Consistent Estimation of Nonlinear Panel Data Models with Correlated Random Effects," (joint with Ji-Liang Shiu).
- 11. "Endogeneity in Semiparametric Regression Models with Nonadditive Errors," (joint with Ji-Liang Shiu).
- 12. "Testing Treatment Effect Monotonicity," (joint with Tsung-Chih Lai and Jen-Che Liao).

- 13. "Testing Treatment Effect Monotonicity in Regression Discontinuity Design," (joint with Shu Shen).
- 14. "Robust Tests for Symmetry with Weakly Dependent Data," (joint with Wei-Ming Lee and Chung-Ming Kuan).

### RESEARCH EXPERIENCE

Research Assistant, University of Texas at Austin

For Stephen G. Donald, Daniel S. Hamermesh and Yingyao Hu. Spring 2007

Research Assistant, Academia Sinica, Taiwan

For Chung-Ming Kuan. January 2004--June 2004

### TEACHING EXPERIENCE

Instructor, University of Missouri at Columbia

Advanced Topics in Econometrics I (graduate)

Introductory Econometrics (undergraduate)

Econometric Methods I (graduate)

Fall 2011

Spring 2011, Spring 2012

Spring 2011, Spring 2012

Instructor, University of Texas at Austin

Math Camp for incoming Ph.D. students Summer 2006, 2008, 2009

Teaching Assistant, University of Texas at Austin

Advanced Econometrics II: Panel Data

Advanced Econometrics II: Time Series Econometrics

Econometrics II

Econometrics I

Econometrics I

Fall 2008, Spring 2008

Fall 2007, Fall 2006

Spring 2006

Probability and Statistics

Fall 2005

Undergraduate Statistics

Spring 2005, Fall 2004

Teaching Assistant, National Taiwan University, Taiwan

Undergraduate Statistics Fall 2000--Spring 2002

## PROFESSIONAL SERVICE AND ACTIVITIES

Referee for:

Annals of Statistics, Economic Inquiry, Emerging Markets Finance and Trade, Econometric Reviews, Econometric Theory, Economics Bulletin, European Journal of Operational Research, International Economic Review, International Journal of Forecasting, Journal of Applied Econometrics, Journal of Business and Economic Statistics, Journal of Econometric Methods, Journal of Econometrics, Mathematics and Computers in Simulation, Oxford Bulletin of Economics and Statistics, Review of Economics and Statistics, Statistics and Probability Letters.

### LANGUAGE

English (fluent), Chinese (native)