9th Annual SoFiE Conference

June 14 – 17, 2016

Program

香港城市大學
City University of Hong Kong
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Department of
ECONOMICS & FINANCE

Global Research Unit

SoFiE

Contents

Welcome

On behalf of the Department of Economics and Finance and the Global Research Unit (GRU), City University of Hong Kong, it is a great pleasure for me to welcome you to the ninth annual Society for Financial Econometrics (SoFiE) conference.

The annual SoFiE conferences rotate among North America, Europe, and Asia. The most recent conference was held at Aarhus University, Denmark.

Hong Kong is a cosmopolitan city strategically located in the heart of Asia and it is a fascinating city of contrasts, offering a rich tapestry of cultural and leisure pursuits. At City University of Hong Kong (CityU), we are pleased to host the third Asian annual SoFiE conference which, due to last year's inaugural success, also includes a pre-conference for young scholars.

CityU is a modern research-led university in a vibrant and dynamic environment. The Department of Economics and Finance is part of the university's College of Business, and its mission is to be a center of excellence in research and teaching. The Global Research Unit is a relatively new research group that focuses on the Asia-Pacific region, and promotes cutting-edge research on global economic and financial issues.

Welcome to CityU. I hope that you will enjoy the conference and our university. I also wish you a pleasant and interesting stay in Hong Kong.

Sincerely,

Yin-Wong Cheung
Founding Director of GRU
Hung Hing Ying Chair Professor of International Economics
Department of Economics and Finance
City University of Hong Kong

Acknowledgement: We thank the Hung Hing Ying and Leung Hau Ling Charitable Foundation（孔慶熒及梁巧玲慈善基金）for their generous support through the Hung Hing Ying Chair Professorship of International Economics（孔慶熒講座教授（國際經濟）.

Welcome

Dear Participants,

Welcome to the ninth annual conference of the Society for Financial Econometrics (SoFiE). It is our great pleasure to recognize the tremendous contribution of CityU to financial econometrics by organizing in Hong Kong our third annual meeting located in Asia.

For those new to the society, SoFiE is a global network of academics and practictioners dedicated to sharing research and ideas in the fast-growing field of financial econometrics. It is an independent non-profit membership organization, committed to promoting and expanding research and education by organizing and sponsoring conferences, programs and activities at the intersection of finance and econometrics, including links to macroeconomic fundamentals. The society benefits from the invaluable support of its individual and institutional members from around the world.

If this is the first time you're participating in a SoFiE conference, please learn more about us by visiting our webpage (*http://sofie.stern.nyu.edu*) and our Facebook group (*https://www.facebook.com/groups/sofienyu*), where you will find information about membership, our institutional members, the society's journal, the Journal of Financial Econometrics published by Oxford University Press, and more.

We are delighted that this year again we have an impressive program. In addition, we are again pleased to offer at this year's conference the Pre-Conference day, specially dedicated to young researchers.

Special thanks to Jianqing Fan for having accepted to act as the 2016 Program Chair; Eric Ghysels and Jane Yum for their valuable assistance, and compliments to all for an outstanding job.

We are proud of all SoFiE has accomplished thanks to the support of you, our members and partners, and look forward to continued progress in the future.

Enjoy the conference!

Sincerely,

Ravi Jagannathan

Ravi Jagannathan
President, SoFiE

Program

Tuesday – June 14, 2016

8:00–9:00 am	Registration/Coffee
9:00–9:15 am	***Opening Remarks*** **Giorgio Valente**, City University of Hong Kong

SESSION 1 – LT17

9:15–10:45 am	***Francis X. Diebold Lecture*** *"Estimating Global Bank Network Connectedness"*
10:45–11:00 am	Refreshment Break

SESSION 2 – LT17

11:00–12:30 pm	***Francis X. Diebold Lecture*** *"Estimating Global Bank Network Connectedness"*
12:30–2:00 pm	Lunch – City Chinese Restaurant, 8/F Amenities Building

SESSION 3 – LT17 *Chair: Roberto S. Mariano*

2:00–3:30 pm	**Bo Hu**, *Functional Autoregressive Model for Time Series of State Distributions* (with Joon Y. Park and Junhui Qian) **Qi Xu**, *Dissecting Volatility Risks in Currency Markets* (with Ingmar Nolte and Mark Taylor) **Yoann Potiron**, *Estimating the Integrated Parameter of the Locally Parametric Model in High-Frequency Data*
3:30–3:45 pm	Refreshment Break

SESSION 4 – LT17 *Chair: Yin-Wong Cheung*

3:45–4:45 pm	**Marc Paolella**, *Portfolio Selection with Active Risk Monitoring* (with Pawel Polak) **Huichou Huang**, *The Term Structure of Exchange Rate Predictability: Commonality, Scapegoat, and Disagreement*
6:00–9:00 pm	Pre-Conference Dinner - Staff Lounge, City Top, 9/F Amenities Building

Wednesday – June 15, 2016

8:00–9:00 am Registration/Coffee

9:00–9:10 am ***Opening Remarks***
Arthur Ellis, Provost of City University of Hong Kong

SESSION 1 (Plenary) – LT17 *Chair: Jianqing Fan*

9:10–9:55 am ***Invited Lecture***
Harrison Hong, Princeton University
"Robust Measures of Earnings Surprises"

9:55–10:15 am Refreshment Break

SESSION 2 (Parallel) – P4701, P4703, P4704

10:15–12:15 pm ***Parallel Session 2A: Trading and Investment***
Chair: Torben Andersen

Niels Strange Grønborg, *Picking Funds with Confidence* (with Asger Lunde, Allan Timmermann and Russ Wermers)

Dobrislav Dobrev, *High-Frequency Cross-Market Trading: Model Free Measurement and Applications* (with Ernst Schaumburg)

Yan Liu, *Lucky Factors* (with Campbell Harvey)

Ke Wu, *Stock Return Asymmetry: Beyond Skewness* (with Lei Jiang, Guofu Zhou and Yifeng Zhu)

10:15–12:15 pm ***Parallel Session 2B: Portfolio Choice and Optimization***
Chair: Xu Han

Michael Wolf, *Nonlinear Shrinkage of the Covariance Matrix for Portfolio Selection: Markowitz Meets Goldilocks* (with Olivier Ledoit)

Jianchang Hu, *High Dimensional Minimum Variance Portfolio Estimation* (with Tony Cai, Yingying Li and Xinghua Zheng)

Raymond Kan, *Optimal Portfolio Selection With and Without Risk-free Asset* (with Xiaolu Wang and Guofu Zhou)

Yarema Okhrin, *Optimal Shrinkage-Based Portfolio Selection in High Dimensions* (with Taras Bodnar and Nestor Parolya)

10:15–12:15 pm ***Parallel Session 2C: Idiosyncraticity and Asset Pricing***
Chair: Andrew Patton

Bas Werker, *APT with Idiosyncratic Variance Factors* (with Eric Renault and Thijs van der Heijden)

Ilze Kalnina, *Cross-Sectional Dependence in Idiosyncratic Volatility* (with Kokouvi Tewou)

Fabio Trojani, *The Price of the Smile and Variance Risk Premia* (with Claudio Tebaldi and Peter Gruber)

Carlo Sala, *Sentiment Lost: The Effect of Projecting the Empirical Pricing Kernel onto a Smaller Filtration Set* (with Giovanni Barone-Adesi)

12:15–1:45 pm Lunch – City Chinese Restaurant, 8/F Amenities Building

12:15–1:45 pm ***Poster Session 1 – Outside LT17***

Ostap Okhrin, *Flexible HAR Model for Realized Volatility* (with Francesco Audrino and Chen Huang)

Marcelo Fernandes, *March Madness in Wall Street: (What) Does the Market Learn from Stress Tests?* (with Deniz Igan and Marcelo Pinheiro)

Bertille Antoine, *Robust Inference in Weakly Identified Asset Pricing Models* (with Eric Renault)

Fabio Trojani, *Divergence and The Price of Uncertainty* (with Paul Schneider)

SESSION 3 (Plenary) – LT17 *Chair: Giorgio Valente*

1:45–2:30 pm	***Invited Lecture*** **Hao Zhou**, PBC School of Finance, Tsinghua University *"Term Structure of Interest Rates with Short-Run and Long-Run Risks"*
2:30–3:00 pm	Refreshment Break

SESSION 4 (Parallel) – P4701, P4703, P4704

3:00–5:00 pm

Parallel Session 4A: New Developments of Financial Econometrics
Chair: Robert F. Engle

Heejoon Han, *The Cross-Quantilogram: Measuring Quantile Dependence and Testing Directional Predictability Between Time Series* (with Oliver Linton, Tatsushi Oka and Yoon-Jae Whang)

Federico Bandi, *Possibly Nonstationary Cross-Validation* (with Valentina Corradi and Daniel Wilhelm)

Christian Conrad, *Misspecification Testing in GARCH-MIDAS Models* (with Melanie Schienle)

Paulo Rodrigues, *Residual-Augmented IVX Predictive Regression* (with Matei Demetrescu)

3:00–5:00 pm

Parallel Session 4B: Term Structure and Interest Rates
Chair: Giorgio Valente

Andrey Ermolov, *Macro Risks and the Term Structure of Interest Rates* (with Eric Engstrom, Geert Bekaert)

Shuo Cao, *Learning about Term Structure Predictability under Uncertainty*

Haoxi Yang, *Demographics and the Behavior of Interest Rates* (with Carlo Favero and Arie Gozluklu)

Guillaume Roussellet, *Affine Term Structure Modeling and Macroeconomic Risks at the Zero Lower Bound*

3:00–5:00 pm

Parallel Session 4C: Speculative Bubbles and Risk Premia
Chair: Viktor Todorov

Jieyang Chong, *Testing for Speculative Bubbles: Revisiting the Rolling Window* (with Stan Hurn)

Soohun Kim, *Ex-Post Risk Premia Tests using Individual Stocks: The IV-GMM Solution to the EIV Problem* (with Georgios Skoulakis)

Martijn Boons, *Horizon-Specific Macroeconomic Risks and the Cross Section of Expected Returns* (with Andrea Tamoni)

Simone Manganelli, *Quantile Impulse Response Functions* (with Sulkhan Chavleishvili)

6:00 –9:00 pm

Gala Dinner – Jasmine Room, Level 2, Royal Park Chinese Restaurant, Royal Park Hotel
Leong Cheung
Executive Director, Charities & Community, The Hong Kong Jockey Club
The Hong Kong Jockey Club: Dialogue on Philanthropy with the World's 6th Top Private Foundation

Thursday – June 16, 2016

8:30–9:00 am Registration/Coffee

SESSION 5 (Plenary) – LT17 *Chair: Francis X. Diebold*

9:10–9:55 am ***Invited Lecture***
Michael McCracken, Federal Reserve Bank of St. Louis
"Tests of Equal Accuracy for Nested Models with Estimated Factors"

9:55–10:05 am Refreshment Break

SESSION 6 (Parallel) – P4701, P4703, P4704

10:05–12:05 pm ***Parallel Session 6A: Interest Rates and Inflation***
Chair: Cho-Hoi Hui

Svetlana Bryzgalova, *The Consumption Risk of Bonds and Stocks* (with Christian Julliard)

Tao L. Wu, *Interest Rate Derivatives Pricing when Banks are Risky and Markets are Illiquid* (with Geoffrey Harris)

Jean-Paul Renne, *The Joint Dynamics of the U.S. and Euro Area Inflation Expectations*
(with Olesya Grishchenko and Sarah Mouabbi)

10:05–12:05 pm ***Parallel Session 6B: Market Liquidity***
Chair: Dan Li

Jens Henrik Eggert Christensen, *The TIPS Liquidity Premium* (with Martin M. Andreasen, Kevin Cook and Simon Riddell)

Andras Fulop, *Transparency Regime Initiatives and Liquidity in the CDS Market* (with Laurence Lescourret)

Serge Darolles, *Financial Market Liquidity: Who Is Acting Strategically?* (with Gaelle Le Fol and Gulten Mero)

James M. Gillan, *Does Quantitative Easing Affect Market Liquidity?* (with Jens Henrik Eggert Christensen)

10:05–12:05 pm ***Parallel Session 6C: Econometric Analysis of Financial Returns and Risks***
Chair: Timo Teräsvirta

Gustavo Schwenkler, *Efficient Parameter Estimation for Multivariate Jump-Diffusions* (with François Guay)

Jiening Pan, *A Test of General Asymmetric Dependence* (with Lei Jiang, Esfandiar Maasoumi and Ke Wu)

Daniele Bianchi, *The Dynamics of Expected Returns: Evidence from Multi-Scale Time Series Modeling* (with Andrea Tamoni)

Xinghua Zheng, *Tests for Covariance Matrices When There is Heteroskedasticity* (with Xinxin Yang, Jiaqi Chen and Hua Li)

12:05–1:45 pm Lunch - City Chinese Restaurant, 8/F Amenities Building

12:05–1:45 pm	***Poster Session 2 – Outside LT17***
	Zhenyu Cui, *Non-Affine GARCH Option Pricing Models, Variance Dependent Kernels, and Diffusion Limits* (with Alex Badescu and Juan-Pablo Ortega)
	Mika Meitz, *Identification and Estimation of Non-Gaussian Structural Vector Autoregressions* (with Markku Lanne and Pentti Saikkonen)
	Adam Clements, *News and Network Structures in Equity Market Volatility* (with Yin Liao)
	Jakob Guldbæk Mikkelsen, *Maximum Likelihood Estimation of Time-Varying Loadings in High-Dimensional Factor Models* (with Eric Hillebrand and Giovanni Urga)
	Tomas Krehlik, *Measuring the Frequency Dynamics of Financial Connectedness and Systemic Risk* (with Jozef Barunik)

SESSION 7 (Parallel) – P4701, P4703, P4704

1:45–3:45 pm	***Parallel Session 7A: Systemic and Credit Risks*** *Chair: Fabio Trojani*
	Christian Gouriéroux, *Structural Dynamic Analysis of Systematic Risk*
	Shaojun Zhang, *Systemic Default and Return Predictability in the Stock and Bond Markets* (with Jack Bao and Kewei Hou)
	Roberto Renò, *The Drift Burst Hypothesis* (with Kim Christensen)
	Paul Schneider, *An Anatomy of the Equity Premium*
1:45–3:45 pm	***Parallel Session 7B: Asset Pricing*** *Chair: Pasquale Della Corte* **Nicola Fusari**, *Short-Term Market Risks Implied by Weekly Options* (with Torben Andersen and Viktor Todorov) **Te-Feng Chen**, *Volatility-of-Volatility Risk in Asset Pricing* (with San-Lin Chung and Ji-Chai Lin) **Viktor Todorov**, *The Pricing of Tail Risk: Evidence from International Option Markets* (with Torben Andersen and Nicola Fusari) **Yan Liu**, *Index Option Returns and Generalized Entropy Bounds*
1:45–3:45 pm	***Parallel Session 7C: Risk Modelling and Testing*** *Chair: Adam Clements*
	Xiaolu Zhao, *More Accurate Volatility Estimation and Forecasts Using Price Durations* (with Ingmar Nolte, Stephen J Taylor)
	Mikkel Bennedsen, *Volatility Modelling: Decoupling the Short- and Long-Term Behavior of Stochastic Volatility* (with Asger Lunde and Mikko S. Pakkanen)
	Wolfgang Karl Härdle, *Leveraged ETF Options Implied Volatility Paradox: a Statistical Study* (with Sergey Nasekin and Zhiwu Hong)
	Shangyu Xie, *Efficient Estimation of Integrated Volatility Incorporating Trading Information* (with Yingying Li and Xinghua Zheng)
3:45–4:05 pm	Refreshment Break

SESSION 8 (Plenary) – LT17

Chair: Federico Bandi

4:05–5:00 pm	***Halbert White Jr. Memorial JFEC Invited Lecture*** **René Garcia**, EDHEC Business School *"Nonparametric Tail Risk, Stock Returns and the Macroeconomy"*
	Discussants: **Olivier Scaillet** (with Lorenzo Camponovo and Fabio Trojani) **Dobrislav Dobrev** (with Ernst Schaumburg)

SESSION 9 (Plenary) – LT17

5:00–5:30 pm	***SoFiE Members Meeting***
7:00–10:00 pm	SoFiE Council Members Meeting & Dinner

Friday – June 17, 2016

8:30–9:00 am	Registration/Coffee
SESSION 10 (Plenary) – LT17	***Chair: Eric Ghysels***
9:00–9:45 am	***Invited Lecture*** **Olivier Scaillet**, University of Geneva & Swiss Finance Institute *"A Diagnostic Criterion for Approximate Factor Structure"*
9:45–10:05 am	Refreshment Break
SESSION 11 (Parallel) – P4701, P4703, P4704	
10:05–12:05 pm	***Parallel Session 11A: Jumps Detection*** *Chair: Yingying Li* **Robert Davies**, *Data-Driven Jump Detection Thresholds for Application in Jump Regressions* (with George Tauchen) **Cecilia Mancini**, *Truncated Realized Covariance When Prices Have Infinite Variation Jumps* **Aleksey Kolokolov**, *Efficient Multipowers* (with Roberto Renò) **George Tauchen**, *Robust Jump Regressions* (with Jia Li and Viktor Todorov)
10:05–12:05 pm	***Parallel Session 11B: Value-at-Risk and Information Feedback*** *Chair: Michele Marzano* **Erik Kole**, *Forecasting Value-at-Risk under Temporal and Portfolio Aggregation* (with Thijs Markwat, Anne Opschoor and Dick Van Dijk) **Thor Nielsen**, *Backtesting Value-at-Risk: A Generalized Markov Framework* **Xiaochun Meng**, *Forecasting Value-at-Risk by Estimating the Quantiles of the Intra-Day Low and High Series* (with James Taylor) **Nikolaus Hautsch**, *Volatility, Information Feedback and Market Microstructure Noise: A Tale of Two Regimes* (with Torben Andersen and Gökhan Cebiroglu)
10:05–12:05 pm	***Parallel Session 11C: Currency and Stock Returns*** *Chair: Paul Schneider* **Riccardo Colacito**, *Currency Risk Factors in a Recursive Multi-Country Economy* (with Robert Ready and Mariano Croce Federico Gavazzoni) **Pasquale Della Corte**, *Macro Uncertainty and Currency Premia* (with Aleksejs Krecetovs) **Deniz Erdemlioglu**, *Financial Flights, Stock Market Linkages and Jump Excitation* (with Mardi Dungey, Marius Matei and Xiye Yang) **Piotr Orlowski**, *Arbitrage Free Dispersion* (with Andras Sali and Fabio Trojani)
12:05–1:45 pm	Lunch – City Chinese Restaurant, 8/F Amenities Building

SESSION 12 (Parallel) – P4701, P4703, P4704

1:45–3:45 pm	***Parallel Session 12A: Applications of Factor Models*** *Chair: Jeff Hong*
	Markus Pelger, *Large-Dimensional Factor Modeling Based on High-Frequency Observations*
	Xu Han, *Estimation and Inference in Over-identified Structural Factor-Augmented VAR Models*
	Wei Wei, *Identifying Uncertainties from Multiple Factors: A Study on Electricity Price* (with Asger Lunde)
	Mengmeng Ao, *Recovering Mean-Variance Efficiency Under Factor Models* (with Yingying Li and Xinghua Zheng)
1:45–3:45 pm	***Parallel Session 12B: Analysis of High Frequency Data*** *Chair: Nikolaus Hautsch*
	Yingying Li, *Volatility of Volatility: Estimation and Tests Based on Noisy High Frequency Data* (with Guangying Liu)
	Rui Da, *When ARMA Meets High-Frequency Data: An Integrated Theory* (with Dacheng Xiu)
	Kim Christensen, *Inference from High-Frequency Data: A Subsampling Approach* (with Mark Podolskij, Bezirgen Veliyev and Nopporn Thamrongrat)
	Andrew Patton, *Asymptotic Inference about Predictive Accuracy using High Frequency Data* (with Jia Li)
1:45–3:45 pm	***Parallel Session 12C: Measuring Risks*** *Chair: Christian Gouriéroux*
	Weining Wang, *TENET: Tail-Event Driven NETwork Risk* (with Wolfgang Härdle and Lining Yu)
	Alexander Ristig, *Conditional Systemic Risk with Penalized Copula* (with Ostap Okhrin, Jeffrey Sheen and Stefan Trück)
	Jozef Barunik, *Quantile Cross-Spectral Measures of Dependence Between Economic Variables* (with Tobias Kley)
	Paul Schneider, *(Almost) Model-Free Recovery* (with Fabio Trojani)
3:45–4:05 pm	Refreshment Break

SESSION 13 (Plenary) – LT17 *Chair: Ravi Jagannathan*

4:05–4:50 pm	***Invited Lecture*** **Per Mykland**, University of Chicago *"Precision of the Observed Asymptotic Variance and the Quadratic Variation of Spot Parameters"*
4:50–5:00 pm	***Closing Remarks*** **Ravi Jagannathan**, Northwestern University

Invited Speakers

Pre-Conference Speaker: Francis X. Diebold

Francis X. Diebold is Paul F. and Warren S. Miller Professor of Social Sciences, and Professor of Economics, Finance and Statistics, at the University of Pennsylvania. He has published widely in econometrics, forecasting, finance, and macroeconomics, and he has served on the editorial boards of leading journals including *Econometrica*, *Review of Economics and Statistics*, *International Economic Review*, *Journal of Business and Economic Statistics*, and *Journal of Applied Econometrics*. He is an NBER Faculty Research Associate, as well as an elected Fellow of the Econometric Society, the American Statistical Association, and the International Institute of Forecasters. He has been the recipient of Sloan, Guggenheim, and Humboldt fellowships, Co-Director of the Wharton Financial Institutions Center, and President of the Society for Financial Econometrics. He lectures widely and has held visiting professorships at Princeton, Chicago, Johns Hopkins, and NYU. He has received several awards for outstanding teaching, and his academic "family" includes more than 70 Ph.D. students. Diebold's academic research is firmly linked to practical matters: During 1986-1989 he served as an economist under both Paul Volcker and Alan Greenspan at the Board of Governors of the Federal Reserve System, during 2007-2008 he served as an Executive Director of Morgan Stanley Investment Management, and during 2012-2013 he served as Chairman of the Federal Reserve System's Model Validation Council.

Abstract

Estimating Global Bank Network Connectedness

We use lasso methods to shrink, select and estimate the network linking the publicly-traded subset of the world's top 150 banks, 2003-2014. We characterize static network connectedness using full-sample estimation and dynamic network connectedness using rolling-window estimation. Statistically, we find that global banking connectedness is clearly linked to bank location, not bank assets. Dynamically, we find that global banking connectedness displays both secular and cyclical variation. The secular variation corresponds to gradual increases/decreases during episodes of gradual increases/ decreases in global market integration. The cyclical variation corresponds to sharp increases during crises, involving mostly cross-country, as opposed to within-country, bank linkages.

Halbert White Jr. Memorial JFEC Invited Lecture: René Garcia

René Garcia holds a Ph.D. in Economics from Princeton University. He is Professor of Finance at EDHEC Business School. Formerly, he was a professor at Université de Montréal, held the Hydro-Québec Chair in Risk Management and was a Research Fellow of the Bank of Canada. He was also the scientific director of the Centre for Interuniversity Research and Analysis on Organizations (CIRANO). He is a co-founding editor of the Journal of Financial Econometrics, published by Oxford University Press and was Editor-in-Chief until June 2012. His recent research focuses on the evaluation of asset pricing models accounting for higher moments, long-run risk asset pricing models, and the funding liquidity premium in bonds and equities. His work has appeared in numerous publications, including the *Journal of Finance*, *Review of Financial Studies*, *Econometrica* and *Journal of Econometrics*.

Abstract

Nonparametric Tail Risk, Stock Returns and the Macroeconomy

This paper introduces a new tail risk measure based on the risk-neutral excess expected shortfall of a cross-section of stock returns. We propose a novel way to risk neutralize the returns without relying on option price information. Empirically, we illustrate our methodology by estimating a tail risk measure over a long historical period based on a set of size and book-to-market portfolios. We find that a risk premium is associated with long-short strategies with portfolio sorts based on tail risk sensitivities of individual securities. Our tail risk index also provides meaningful information about future market returns and aggregate macroeconomic conditions. It also forecasts other tail risk measures. Results are robust to the cross-sectional information selected to compute the tail risk measure. Moreover, our methodology is applicable to a broad set of assets and markets and can be used readily by regulators and risk managers.

Harrison Hong

Harrison Hong is the John Scully '66 Professor of Economics and Finance at Princeton University. He received his B.A. in economics and statistics with highest distinction from the University of California at Berkeley in 1992 and his Ph.D. in economics from M.I.T. in 1997. His work has covered diverse topics, including behavioral finance and market efficiency, agency and biased decisions, organizational diseconomies and performance, social interaction and investor behavior, and social responsibility and the stock market. In 2009, he was awarded the Fischer Black Prize, given once every two years to the best American finance economist under the age of 40. He is a research associate at the National Bureau of Economic Research and currently an editor of the *International Journal of Central Banking*. He has been an associate editor at the *Journal of Finance*, *Journal of Financial Intermediation* and a Director of the American Finance Association.

Abstract

Robust Measures of Earnings Surprises

Event studies of market efficiency measure an earnings surprise with the consensus error (CE), defined as earnings minus the average of professional forecasts. However, individual forecasts can be biased. CE and traditional robust statistics such as medians are not robust to such bias. We prove and show empirically that the fraction of forecasts that miss on the same side ($\ FOM$), by ignoring the size of the misses, is a more robust parameter-free estimate. It performs better than an approach that estimates and adjusts for individual forecast bias. We bound FOM's efficiency relative to a benchmark where bias parameters are known.

Michael McCracken

Michael McCracken is an Assistant Vice-President at the Federal Reserve Bank of St. Louis. He previously worked as an Economist at the Federal Reserve Board of Governors and as a professor of Economics at both the University of Missouri and Louisiana State University. His research is in time series econometrics with an emphasis on forecasting in general and forecast evaluation in particular.

Abstract

Tests of Equal Accuracy for Nested Models with Estimated Factors

In this paper we develop asymptotics for tests of equal predictive ability between nested models when factor-augmented regression models are used to forecast. We provide conditions under which the estimation of the factors does not affect the asymptotic distributions developed in Clark and McCracken (2001) and McCracken (2007). This enables researchers to use the existing tabulated critical values when conducting inference. As an intermediate result, we derive the asymptotic properties of the principal components estimator over recursive windows. We provide simulation evidence on the finite sample effects of factor estimation and apply the tests to the case of forecasting excess returns to the S&P 500 Composite Index.

Per Mykland

Per Mykland is Robert M. Hutchins Distinguished Professor of Statistics and Finance at the University of Chicago, where he is also Director of the Stevanovich Center for Financial Mathematics. He is an Associate Member of the Oxford-Man Institute at the University of Oxford. He has held appointments at Oxford and Princeton.

Mykland's main research interests are the statistics and econometrics for time dependent processes, including time series and continuous processes. Highlights include the development of likelihood and expansion methods for martingales (fair games), especially in the context of estimating equations. The results have wide application, including the construction of new nonparametric likelihoods in time series and survival analysis.

His recent focus is high-frequency data, mainly in finance. In one breakthrough, he has shown how to connect the analysis of such data with classical statistical techniques, via local likelihood and contiguity. He has contributed to the theory of estimation under microstructure, including the development of the two-scales and pre-averaging estimators of volatility and other intra-day quantities. He has also developed an approach for integrating statistical and market information in the pricing and hedging of options, with a particular view to hedging against statistical uncertainty.

A long-run research goal is for a unified theory of continuous-time finance and high-frequency data. The former reasons through hypothetical high-frequency data, but now these data are no longer hypothetical but very real.

Professor Mykland is Associate Editor for several journals, including the *Journal of the American Statistical Association*, and *Journal of Financial Econometrics*. He is a fellow of the Institute of Mathematical Statistics, the American Statistical Association and the Society for Financial Econometrics (SoFiE). He is a member of the Council of the SoFiE and has previously served on the Council of the Institute of Mathematical Statistics. Mykland will be President of the Society for Financial Econometrics in 2017-19. He has supervised sixteen PhD students, who are now spread between academia and industry.

Abstract

Precision of the Observed Asymptotic Variance and the Quadratic Variation of Spot Parameters

The authors have recently developed an Observed Asymptotic Variance (Observed AVAR), which sets standard errors for high frequency data based estimators of integrated parameters. The Observed AVAR does not require knowledge of the analytic form of the asymptotic variance. As a by-product, we also obtain an estimator of the quadratic variation (QV) of a spot parameter. The spot parameter can be a general semi-martingale, such as volatility, covariance, regression coefficient, or leverage effect. The estimators of AVAR and QV are on a two scales form, or more generally, can be obtained by regression. We show how these estimators arise by analyzing the within and between period properties of estimators. In a new development, we explore the quality of these estimators with the help of central limit results.

Olivier Scaillet

Olivier Scaillet, Belgian, is professor of finance and statistics at the Geneva Finance Research Institute of the University of Geneva and has a senior chair at the Swiss Finance Institute. He holds both a master and Ph.D. from University Paris IX Dauphine in applied mathematics. Professor Scaillet's research expertise is in the area of derivatives pricing, econometric theory and econometrics applied to finance and insurance. He has published several papers in top journals in econometrics and finance, and co-authored a book on financial econometrics. He has been one of the winners of the bi-annual award for the best paper published in the Journal of Empirical Finance on the topic of quantitative risk management and of the Banque Privée Espirito Santo award prize on the topic of mutual fund performance. He is associate editor of several leading academic journals in econometrics, statistics, banking and finance. He is an advisor for research teams in the finance and banking industry.

Abstract

A Diagnostic Criterion for Approximate Factor Structure

We build a simple diagnostic criterion for approximate factor structure in large cross-sectional equity datasets. Given a model for asset returns with observable factors, the criterion checks whether the error terms are weakly cross-sectionally correlated or share at least one unobservable common factor. It only requires computing the largest eigenvalue of the empirical cross-sectional covariance matrix of the residuals of a large unbalanced panel. A general version of this criterion allows us to determine the number of omitted common factors. The panel data model accommodates both time-invariant and time-varying factor structures. The theory applies to generic random coefficient panel models under large cross-section and time-series dimensions. The empirical analysis runs on monthly returns for about ten thousand US stocks from January 1968 to December 2011 for several time-varying specifications. Among several multi-factor time-invariant models proposed in the literature, we cannot select a model with zero factors in the errors. On the opposite, we conclude for no omitted factor structure in the errors for several time-varying specifications.

Hao Zhou

Hao Zhou is currently the Unigroup Chair Professor and Associate Dean at PBC School of Finance, Tsinghua University; and a visiting scholar of the Federal Reserve Board since July 2013. He is also the director of Monetary Policy and Financial Stability Research Center and the Deputy Head of National Institute of Financial Research, Tsinghua University. Before 2013, he was a senior economist at the Board of Governors of the Federal Reserve System. Hao's prior official duty involved supervising systemically important financial institution and advising the Board of Governors on macroprudential regulation policy. Hao was visiting professors at MIT and Peking University. He joined the Federal Reserve Board after receiving a PhD degree in economics from Duke University in 2000.

Hao's research agenda covers the areas of consumption-based asset pricing models with stochastic volatility, structural credit risk models and credit derivatives market, financial market volatility and return predictability, dynamic model of term structure of interest rate, realized jumps on financial market, currency risk premium dynamics, systemic risk measurement, China's financial reform and monetary policy. He has published in *Journal of Finance*, *Review of Financial Studies*, *Journal of Financial and Quantitative Analysis*, *Journal of Econometrics*, *Journal of Business and Economic Statistics*, *Journal of Banking and Finance*, *Journal of Financial Econometrics*, *Journal of Financial Services Research*, among others.

His research has been recognized by numerous academic and professional awards, including Chartered Financial Analyst (CFA) Institute, Whitebox Advisors Selected Research Best Financial Research Paper finalist, China International Conference in Finance Best Paper Prize, Crowell Memorial Prize, Chicago Quantitative Alliance (CQA) Academic Competition, BankScope Best Paper Prize of Australasian Finance and Banking Conference, Global Association of Risk Professionals (GARP), Imperial College London Centre for Hedge Fund Research, Bocconi Centre for Applied Research in Finance (CAREFIN), among others. In 2014, Hao was elected to the elite Thousand Talents Program in China and given the Best Teaching and Mentoring Award (for graduate program) by Tsinghua University.

Abstract

Term Structure of Interest Rates with Short-Run and Long-Run Risks

Bond returns are time-varying and predictable. What economic forces drive this variation? To answer this long-standing question, we propose a consumption-based model with recursive preferences, long-run risks, and inflation non-neutrality. Our model offers two important insights. First, our model matches well the upward-sloping U.S. Treasury yield curve. Second, consistent with our model's implication, variance risk premium based on the U.S. interest rate derivatives data emerges as a strong predictor for short-horizon Treasury excess returns, above and beyond the predictive power of other popular factors. In the model equilibrium, the variance risk premium is related to the short-run risks in the economy, while standard forward-rate-based factors are associated with long-run risks in the economy.

Gala Dinner Speaker: Leong Cheung
Executive Director, Charities and Community, The Hong Kong Jockey Club

Mr Leong Cheung joined The Hong Kong Jockey Club as the Executive Director, Charities and Community in 2014.
Mr Cheung has an MBA from Harvard Business School and a Bachelor of Business Administration from the Chinese University of Hong Kong (CUHK). He joined Bain Capital in 2008 and was their Operating Partner. Prior to that, he was Managing Director of Global Sourcing & Supply Chain at Esquel Group, the founder and CEO of an education related Internet venture, CampusAll, in Mainland China, and a senior consultant at the Boston Consulting Group.
Mr Cheung has always been active in public services. He started working on charities and community related work while at Esquel. He helped the firm set up an education foundation in Xinjiang in 2002, building schools and libraries in the rural areas. He is currently Chairman of RunOurCity, an innovative social enterprise he co-founded with the aim of transforming life through running.

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Department of ECONOMICS & FINANCE

Department of Economics and Finance

The Department of Economics and Finance is part of City University of Hong Kong's College of Business. City University of Hong Kong (CityU) aspires to become a leading global university, excelling in research and professional education. In 2015, it was ranked 57th in the QS World University Rankings and 4th in the QS world's top 50 universities under 50 years of age. The university also ranks 2nd in Hong Kong for research impact (Thomson Reuters 2014 Highly Cited Researchers). The College of Business stands at 33rd in the world, and 2nd in the Asia-Pacific region (The UTD Top 100 Business School Research Rankings, the University of Texas at Dallas 2011-2015).

The Department of Economics and Finance has 43 regular and visiting faculty members from all over the world, and 39 PhD students. The Department provides solid training in both the theory and application of economics and finance. It aims at training graduates with cutting-edge knowledge in modern economics and finance providing Hong Kong with the young financial executives, economists, and business analysts it needs. The Department has over 850 undergraduate students and 250 postgraduate students with diverse backgrounds. Most of its postgraduate students are graduates of prestigious universities in Hong Kong and mainland China, as well as overseas countries including USA, Canada, UK, and Germany.

The mission of the Department is to be a center of excellence in research and teaching, using economics and finance for business as well as for public sector decision-making in Hong Kong, mainland China, and other Asia-Pacific economies. Over the years the Department has gained international recognition, in terms of research output it is ranked in the top tier among all universities in the Asia-Pacific region, including Australia and New Zealand, in recently published studies.

The Department is pursuing high quality scholarly research into financial and economic issues with an established excellent research environment, including a productive and energetic research team. With its first-class research facilities, the Department has achieved a leading role in research areas of economics and finance in the Asia-Pacific region and promoted interactions among scholars in Hong Kong and the rest of the world. The Department research strengths lie in applied economics and econometrics with a focus on the links between macroeconomics, finance, international finance and development. Furthermore, its world-class research in finance concentrates on both theoretical and applied areas with a strong emphasis on asset pricing and informational inefficiencies, corporate finance, and market structure.

Global Research Unit (GRU)

The Global Research Unit (GRU) is a leading research group in the Asia-Pacific region on global economic and financial issues, producing and publishing cutting-edge research. GRU also fosters collaboration and cooperation with eminent local and overseas scholars and research institutions, and organizes conferences with international outreach. To achieve our core mission, we are dedicated to producing and publishing cutting-edge research, fostering collaboration and cooperation with eminent local and overseas scholars and research institutions, encouraging student participation in research activities, and strengthening interactions with the local community. The research interests of our founding members include, but are not limited to, International Macroeconomics and Finance, Financial Econometrics, and Market Structure.

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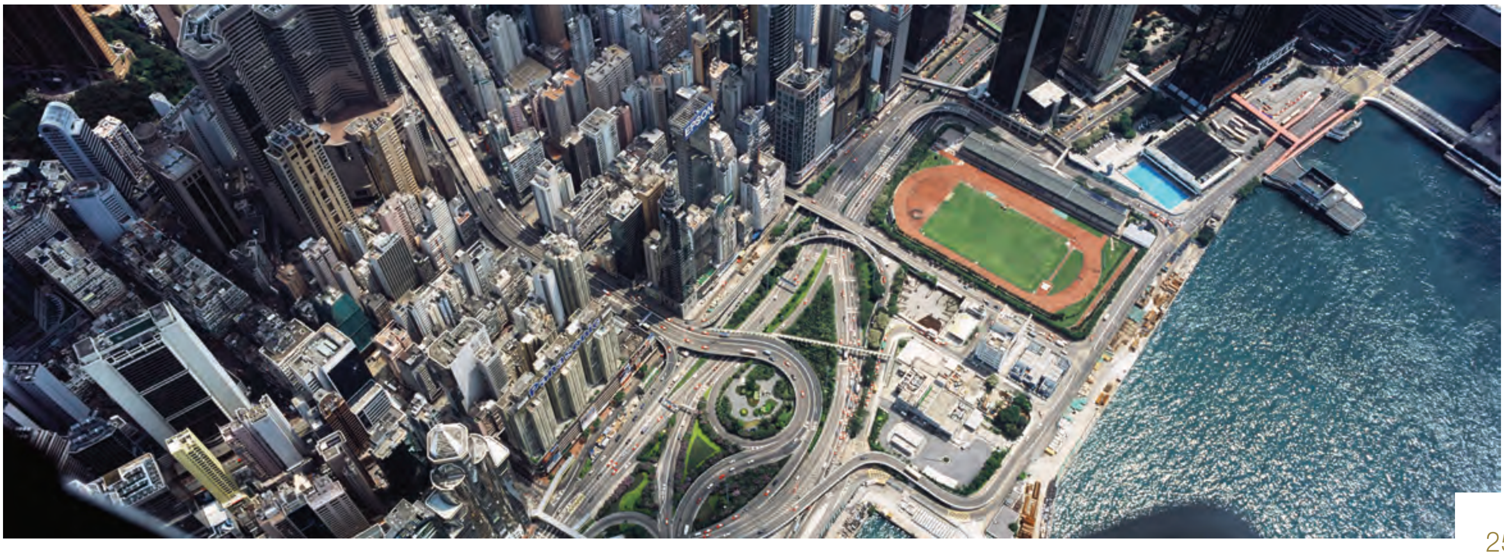
Adverse Weather Arrangements

Typhoon	Signal No. 1 or No. 3
Rainstorm Warning	Amber or Red
The conference will proceed as scheduled.	

Typhoon	Signal Pre-No. 8 or Above
Rainstorm Warning	Black
Sessions of the conference will be canceled as shown below:	
Signal issued	**Sessions canceled**
At or after 7 am	Sessions scheduled before 2:00 pm
At or after noon	Sessions scheduled between 2:00 pm and 6:30 pm
At or after 4 pm	Gala dinner will be canceled and rescheduled for June 16, 2016 (Thursday).

1. If **typhoon warning signal pre-No. 8 or above** is issued when the sessions are already in progress, they will be terminated as soon as practicable. All conference participants and staff are advised to leave as soon as possible.

2. If **black rainstorm warning** is issued when the sessions are already in progress, the sessions will continue. All conference participants and staff are advised to stay until the black rainstorm warning has been cancelled and traffic conditions have improved.



Useful Information

Conference Venue
LT17, P4701, P4703, P4704,
4/F, Academic 1, City University of Hong Kong

Wi-Fi
1. Access via CityU WLAN
   Username: efconf
   Password: EF2016ef (Note the first two letters "EF" are capitalized)
2. Access via EDUROAM

On-site registration desk
Situated outside LT17. Please also ask our support staff if you need help.

Dress code
Please wear comfortable business attire throughout the event. You are required to wear your official conference badge at all conference events.

Catering
Refreshments are available outside LT17.
All lunches are served at City Chinese Restaurant, 8/F Amenities Building (Lift 19 or 20).
Coffee after the lunches will be served outside LT17.

No smoking policy
Under the Smoking (Public Health) (Amendment) Ordinance which has been effected on 1 January 2007, smoking including carrying of lighted cigarette, cigar, or pipe in the University campus (all indoor and outdoor areas) is strictly prohibited. Violation of the law is liable to be fined HK$1500.

Contact
Sofie2016@cityu.edu.hk

Conference Venues

1. 4/F, Academic 1, City University of Hong Kong

By MTR (subway)

Get off at **Kowloon Tong** station, find the exit for **Festival Walk**.
In Festival Walk, go up to Level **LG1**, find Shop LG1-10, take the escalator next to it. Go through the pedestrian subway and the **red** doors to enter Academic 1, take the escalators next to the Library, and go up one level to the **4/F**.

By taxi/car

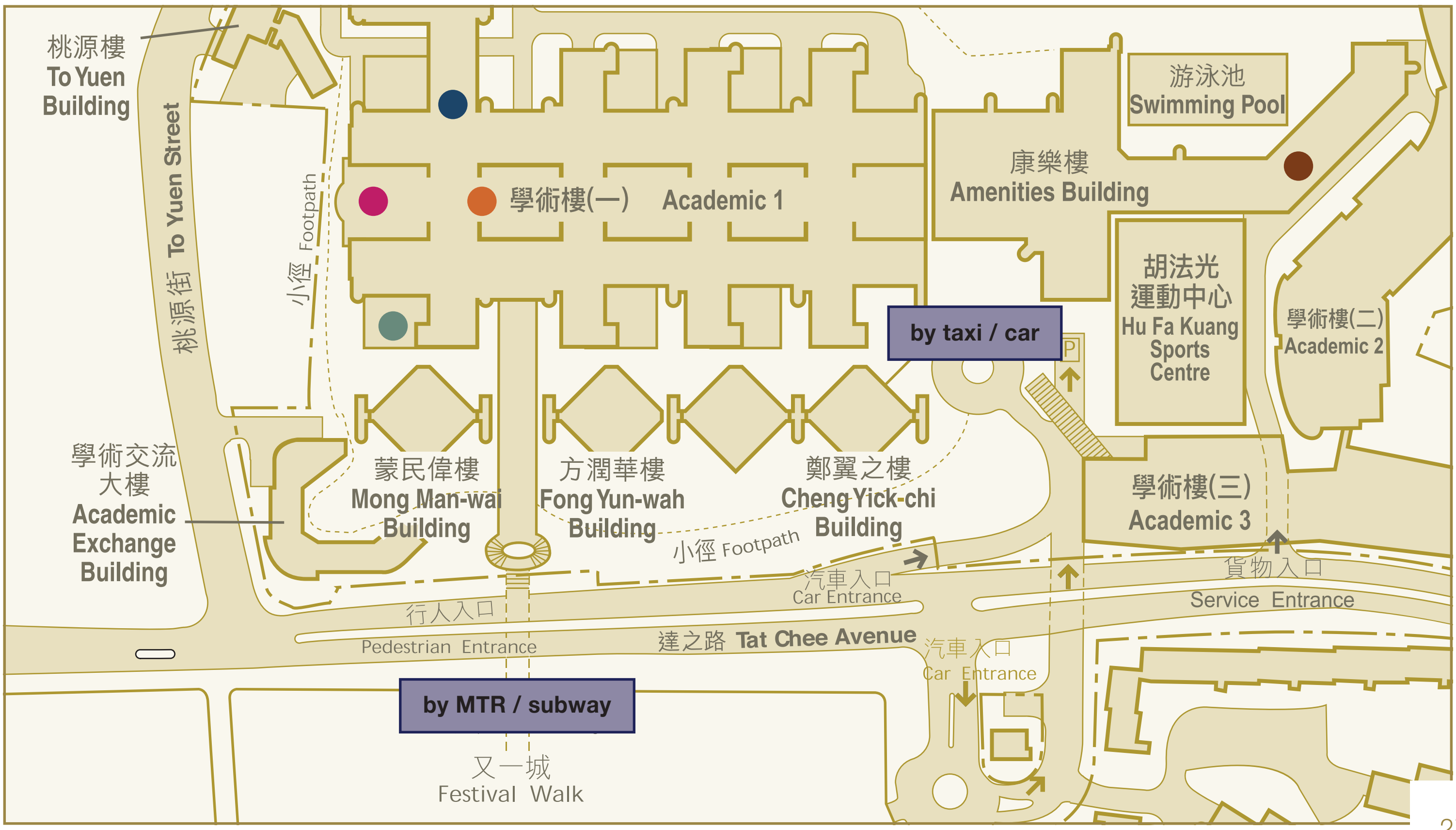
When you drop off at the University Circle, go along the covered walkway which will lead you to the Academic 1. Go through the red doors and you are on the **4/F** of Academic 1.

2. 4/F, Academic 1 - LT17, P4701, P4703, P4704

- On-site Registration Desk
- LT17, near **Lift 6**
- P4701-4704, behind **LT16**
- Poster Session, outside **LT17**

3. Restaurants: Amenities Building - City Chinese Restaurant (8/F) and City Top (9/F)

- From 4/F AC1, go straight through the **red** doors to Amenities Building and then past the Swimming Pool, take **Lifts 19** or **20**.



Gala Dinner

Royal Park Chinese Restaurant

Wednesday June 15, 2016, 6-9pm
Jasmine Room, Level 2, Royal Park Chinese Restaurant
Royal Park Hotel, 8 Pak Hok Ting Street, Shatin, Hong Kong
(Exit A3, Sha Tin MTR Station)
Tel: 2601 2111

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