



**SIXTEENTH ANNUAL SYMPOSIUM
OF
THE SOCIETY FOR NONLINEAR DYNAMICS AND ECONOMETRICS
APRIL 3 – APRIL 4, 2008
FEDERAL RESERVE BANK OF SAN FRANCISCO**

THURSDAY, APRIL 3

- 8:00 – 8:45 **REGISTRATION (FRONT LOBBY)**
CONTINENTAL BREAKFAST (EAST GARDEN COURT LOBBY, 4TH FLOOR)
- 8:30 – 8:45 **WELCOME (CENTRAL 4)**
- 9:00 - 10:30 **SESSION 1: INVITED SESSION: MACRO (4 EAST)**
Chair: Russell Cooper (University of Texas at Austin)
- Stability Theorems for Systems with Bayesian Learners
James Bullard (Federal Reserve Bank of St. Louis)
Jacek Suda (Washington University in St. Louis)
- Monetary Policy and Shifts in TFP Growth
Troy Davig (Federal Reserve Bank of Kansas City)
- Regime-Switching in Rational Expectations Econometric Models
William A. Branch (University of California Irvine)
Giuseppe Ragusa (University of California Irvine)
- 9:00 - 10:30 **SESSION 2: VOLATILITY MODELING (4 WEST)**
Chair: Anders Rahbek (University of Copenhagen)
- A Nonparametric Approach to Estimate Volatility and Correlation Dynamics
Vanessa Mattiussi (City University - London)
Giulia Lori (City University - London)
- Estimation of Stochastic Volatility Models by Nonparametric Filtering
Dennis Kristensen (Columbia University)
Shin Kanaya (University of Wisconsin)
- Bayesian Semiparametric Stochastic Volatility Modeling
Mark J. Jensen (Federal Reserve Bank of Atlanta)
John M. Maheu (University of Toronto)
- 9:00 - 10:30 **SESSION 3: ASSET PRICING (CENTRAL 4A)**
Chair: Michael Dueker (Russell Investments)
- Joint Modeling of Call and Put Implied Volatility
Katja Ahoniemi (Helsinki School of Economics and HECER)
Markku Lanne (University of Helsinki and HECER)
- Assets Returns Volatility and Investment Horizon:
Frederique Bec (CREST and THEMA University of Cergy-Pontoise, France)
Christian Gollier (Toulouse School of Economics, LERNA and IDEI, France)
- A Non-parametric Investigation of Risk Premia
Chiara Peroni (University of East Anglia, RCEA)

- 9:00 - 10:30 **SESSION 4: DYNAMICS (CENTRAL 4B)**
Chair: Willi Semmler (New School University)
- Is Ignorance Bliss? The Cost of Business-Cycle Uncertainty
Stefano d'Addona (University of Rome 3)
Frode Brevik (St. Gallen University)
- Filtering Time Series with Penalized Splines
Goeran Kauermann (University Bielefeld)
Tatyana Krivobokova (Katholieke Universiteit Leuven)
Willi Semmler (New School for Social Research)
- Econophysics and Economic Complexity
J. Barkley Rosser, Jr. (James Madison University)
- 10:30 – 11:00 **COFFEE/TEA (EAST GARDEN COURT LOBBY, 4TH FLOOR)**
- 11:00 - 12:30 **SESSION 5: INVITED SESSION: TIME SERIES (4 EAST)**
Chair: Mark Jensen (Federal Reserve Bank of Atlanta)
- Bayesian Model Selection for Structural Break Models
Andrew Levin (Federal Reserve Board)
Jeremy Piger (University of Oregon)
- The Predictive Power of Output Gap Measures Generated by Nonlinear Models
Richard Luger (Emory University)
David E. Rapach (Saint Louis University)
- The Asymmetric Business Cycle
James Morley (Washington University in St. Louis)
Jeremy Piger (University of Oregon)
- 11:00 - 12:30 **SESSION 6: ADVANCES IN BUSINESS CYCLE ANALYSIS (4 WEST)**
Chair: Troy Davig (Federal Reserve Bank of Kansas City)
- Euler-Equation Estimation for Discrete Choice Models: A Capital Accumulation Application
Russell Cooper (University of Texas)
John Haltiwanger (University of Maryland)
Jonathan Willis (Federal Reserve Bank of Kansas City)
- Capital-Labor Substitution and Equilibrium Indeterminacy Under Increasing Returns to Scale
Jang-Ting Guo (University of California, Riverside)
Kevin J. Lansing (Federal Reserve Bank of San Francisco)
- Speculative Growth and Overreaction to Technology Shocks
Kevin J. Lansing (Federal Reserve Bank of San Francisco)

- 11:00 - 12:30 **SESSION 7: ARCH/GARCH (CENTRAL 4A)**
 Chair: Richard Ashley (Virginia Tech)
- Addressing the IGARCH Puzzle
Anders Tolver Jensen (University of Copenhagen)
Theis Lange (University of Copenhagen)
- Falsifying ARCH/GARCH Models Using Bispectral Based Tests
Melvin J. Hinich (The University of Texas at Austin)
- GARCH Process with Persistent Covariates
Heejoon Han (National University of Singapore)
- 11:00 - 12:30 **SESSION 8: MONETARY POLICY (CENTRAL 4B)**
 Chair: Carl Chiarella (University of Technology, Sydney)
- Optimal Backward and Forward Monetary Policy Under Rational Expectations
Peter A. Zadrozny (Bureau of Labor Statistics)
- Monetary Policy and Stock Market Booms and Busts in the 20th Century
Michael Bordo (Rutgers University)
Michael Dueker (Russell Investments)
David Wheelock (Federal Reserve Bank of St. Louis)
- Monetary Policy and Endogenous Cycles with Cost Channel Heterogeneity
Marco Airaudo (Collegio Carlo Alberto, Italy)
Luis-Felipe Zanna, IMF
- 12:30 – 14:00 **LUNCH (MARKET STREET DINING ROOM, 4TH FLOOR)**
- 14:00 - 15:30 **SESSION 9: INVITED SESSION: ECONOMETRICS (4 EAST)**
 Chair: Christian Dahl (University of Aarhus)
- Classical and Bayesian Analysis of a Probit Panel Data Model with Unobserved Individual Heterogeneity and Autocorrelated Errors
Martin Burda (University of Toronto)
Roman Liesenfeld (Christian-Albrecht-University, Kiel)
Jean-Francois Richard (University of Pittsburgh)
- Finite Sample Bias Corrected IV Estimation for Weak and Many Instruments
Matthew Harding (Stanford University)
Jerry Hausman (MIT)
- Money-Income Granger-Causality in Quantiles
Tae-Hwy Lee (Univeristy of California, Riverside)
Weiping Yang (Capital One Financial Research)

- 14:00 - 15:30 **SESSION 10: ASSET PRICE DYNAMICS AND MACRO (4 WEST)**
 Chair: Sebasatiano Manzan (Baruch College, CUNY)
- Learning about the Interdependence between the Macroeconomy and the Stock Market
Fabio Milani (University of California, Irvine)
- Measuring the Substitutability of Housing and Non-housing Consumption: A Structural Approach
Wenli Li (Federal Reserve Bank of Philadelphia)
Haiyong Liu (East Carolina University)
Rui Yao (Baruch College)
- Learning and Adaptation as a Source of Market Failure
David Goldbaum (University of Technology Sydney)
- 14:00 - 15:30 **SESSION 11: UNIT ROOT TESTS (CENTRAL 4A)**
 Chair: Otilia Boldea (University of Tilburg)
- A Nonlinear Panel Unit Root Test under Cross Sectional Dependence
Mario Cerrato (London Metropolitan University)
Nicholas Sarantis (London Metropolitan University)
Christian de Peretti (University of Evry-Val-d'Essonne, France)
- Testing for a Unit Root in the Asymmetric Nonlinear Smooth Transition Framework
Razvan Pascalau (University of Alabama)
- Panel LM Unit Root Tests with Trend Shifts
Kyung-So Im (Federal Deposit Insurance Corporation)
Junsoo Lee (University of Alabama)
Margie Tieslau (University of North Texas)
- 14:00 - 15:30 **SESSION 12: FX I (CENTRAL 4B)**
 Chair: Helinä Laakkonen (FDPE and University of Jyväskylä)
- Searching for Nonlinearities in Real Exchange Rates
Yamin Ahmad (University of Wisconsin - Whitewater)
Stuart Glosser (University of Wisconsin - Whitewater)
- A Bayesian Analysis of Exchange Rate Dynamics
Ming Chien Lo (St. Cloud State University)
James Morley (Washington University)
- The High-Frequency Response of the EUR-US Dollar Exchange Rate to ECB Communication
Christian Conrad (KOF Swiss Economic Institute, ETH Zurich)
Michael J. Lamla (KOF Swiss Economic Institute, ETH Zurich)
- 15:30 – 16:00 **COFFEE/TEA (EAST GARDEN COURT LOBBY, 4TH FLOOR)**

- 16:00 - 17:30 **SESSION 13: MACRO LEARNING (4 EAST)**
 Chair: Cees Diks (CeNDEF, University of Amsterdam)
- Learning, Expectations Formation, and the Pitfalls of Optimal Control Monetary Policy
John C. Williams (Federal Reserve Bank of San Francisco)
Athanasios Orphanides (Central Bank of Cyprus)
- Bounded Rationality and State-Dependent Sticky Plans
James Costain (Bank of Spain)
Anton Nakov (Bank of Spain)
- Monetary Policy, Model Uncertainty and Exchange Rate Volatility
Agnieszka Markiewicz (Catholic University of Leuven)
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- 16:00 - 17:30 **SESSION 14: NONLINEAR TIME SERIES I (4 WEST)**
 Chair: Jeremy Piger (University of Oregon)
- Likelihood-Based Inference in Nonlinear Error-Correction Models
Anders Rahbek (University of Copenhagen and CREATES)
Dennis Kristensen (Columbia University and CREATES)
- The Additive Random Field Regression Model
Christian M. Dahl (University of Aarhus)
Gloria Gonzalez-Rivera (University of California, Riverside)
Yu Qin (Countrywide Financial Corporation)
- Estimation and Inference in Unstable Nonlinear Least Squares Models
Otilia Boldea (Tilburg University)
Alastair R. Hall (NCSU and Univ. of Manchester)
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- 16:00 - 17:30 **SESSION 15: GROWTH AND THE EQUITY PREMIUM PUZZLE (CENTRAL 4A)**
 Chair: Goeran Kauermann (University Bielefeld)
- Housing Prices and Growth
James A. Kahn (Federal Reserve Bank of New York and New York University)
- Medium Term Growth Reversals
Michal Jerzmanowski (Clemson University)
David Cuberes (Clemson University)
- Idiosyncratic Production Risk and the Equity Premium Puzzle
Geoffrey Dunbar (Simon Fraser University)

16:00 - 17:30 **SESSION 16: MUTUAL AND HEDGE FUNDS (CENTRAL 4B)**
Chair: Douglas M. Patterson (Virginia Tech)

Time Evolution Of Mutual Fund Dynamics
Yonathan Schwarzkopf (California Institute of Technology and Santa Fe Institute)
J. Doyne Farmer (Santa Fe Institute)

Hedge Funds Are Not Destabilizing
Celso Brunetti (Johns Hopkins University)
Michael S. Haigh (Societe Generale)

Realized Portfolio Selection in the Euro Area.
Claudio Morana (Universita' del Piemonte Orientale)

17:30 – 19:30 **RECEPTION (WEST MARKET LOUNGE, 4TH FLOOR)**

FRIDAY, APRIL 4

8:00 – 8:55 **CONTINENTAL BREAKFAST (EAST GARDEN COURT LOBBY, 4TH FLOOR)**

9:00 - 10:30 **SESSION 17: ASSET PRICES, INDETERMINACY, AND COMPLEX DYNAMICS (4 EAST)**
Chair: Barkley Rosser, Jr. (James Madison University)

Dynamic Consumption and Portfolio Decisions with Time Varying Asset Returns
Lars Gruene (University of Bayreuth)
Caroline Oehrlein (University of Bayreuth)
Willi Semmler (New School for Social Research)

Euler Equation Branching
Brian Raines (Baylor University)
David R. Stockman (University of Delaware)

Consistent Route to Randomness
Maciej K. Dudek (National Bank of Poland & Main School of Commerce)

9:00 - 10:30 **SESSION 18: INFLATION AND THE GREAT MODERATION (4 WEST)**
Chair: Gerald Dwyer (Federal Reserve Bank of Atlanta)

A Resolution to the Price Puzzle
Marcelle Chauvet (University of California)

Oil and the Great Moderation
Anton Nakov (Banco de España)
Andrea Pescatori (Federal Reserve Bank of Cleveland)

Inflation Targeting in Canada: An Expected Loss Analysis by a DSGE Model with Trade Costs
Hakan Yilmazkuday (Vanderbilt University)

- 9:00 - 10:30 **SESSION 19: FX II (CENTRAL 4A)**
Chair: Yamin Ahmad (University of Wisconsin - Whitewater)
- Exchange Rate Volatility and First-Time Entry by Multinational Firms
Katheryn Russ (University of California, Davis and NBER)
- Asymmetric News Effects on Exchange Rate Volatility: Good vs. Bad News in Good vs. Bad Times
Helinä Laakkonen (University of Jyväskylä)
Markku Lanne (University of Helsinki)
- Stochastic Bifurcation Analysis of an Exchange Rate Model
Carl Chiarella (The University of Technology, Sydney)
X. He (The University of Technology, Sydney)
M. Zheng (The University of Technology, Sydney)
- 9:00 - 10:30 **SESSION 20: EQUITY AND BOND MARKETS (CENTRAL 4B)**
Chair: Claudio Morana (Universita' del Piemonte Orientale)
- Testing and Modeling Threshold Asymmetries in Multivariate Distributions of U.S. Equity Returns
Emre Yoldas (University of California, Riverside)
- Nonlinear Mutual Prediction Test for Synchronization of Stock Markets
Abdol S. Soofi (University of Wisconsin-Platteville)
Li Zhe (Harbin Institute of Technology)
Xiaofeng Hui (Harbin Institute of Technology)
- Macroeconomic Variables, Euler Equation and Future Returns on Treasury Bonds: (Semi) Nonparametric Investigation
Ai-ru (Meg) Cheng (University of California at Santa Cruz)
Yuriy Kitsul (Georgia State University)
- 10:30 – 11:00 **COFFEE/TEA (EAST GARDEN COURT LOBBY, 4TH FLOOR)**
- 11:00 - 12:30 **SESSION 21: LONG MEMORY (4 EAST)**
Chair: Ivan Paya (Lancaster University)
- Semi Parametric Estimation of Long Memory: Holy Grail or Poisoned Chalice?
Richard T. Baillie (Michigan State University & QMUL)
George Kapetanios (QMUL)
- Estimating DSGE Models with Long Memory Dynamics
Gianluca Moretti (Bank of Italy)
Giulio Nicoletti (Bank of Italy)
- Dual Long Memory, Structural Breaks and the Link Between Turnover and Range Based Volatility
Menelaos Karanasos (Brunel University, UK)
Aris Kartsaklas (University of York, UK)

- 11:00 - 12:30 **SESSION 22: BUBBLES AND CRASHES (4 WEST)**
Chair: David Stockman (University of Delaware)
- A Tension Model of Financial Crashes
George Chang (Grand Valley State University)
James Feigenbaum (University of Pittsburgh)
- Did Herding Cause the Stock Market Bubble of 1998-2001?
Douglas M. Patterson (Virginia Tech)
Vivek Sharma (University of Michigan-Dearborn)
- Sovereign Spreads, Currency Crises, and Fundamentals: A Non-linear Analysis
Melisso Boschi (University of Essex, University of Perugia)
- 11:00 - 12:30 **SESSION 23: HIGH FREQUENCY FINANCE (CENTRAL 4A)**
Chair: Celso Brunetti (Johns Hopkins University)
- Intraday Overreaction of Stock Prices
Martin Becker (Saarland University)
Ralph Friedmann (Saarland University)
Stefan Klößner (Saarland University)
- The Microstructure of a U.S. Treasury ECN: The BrokerTec Platform
Michael Fleming (Federal Reserve Bank of New York)
Bruce Mizraich (Rutgers University)
- A New Approach to Understanding the Market Impact of Large Trading Orders
Austin Gerig (Santa Fe Institute)
J. Doyne Farmer (Santa Fe Institute and LUISS Guido Carli)
Fabrizio Lillo (Santa Fe Institute and INFM Unita di Palermo)
Henri Waelbroeck (Pipeline Financial Group, Inc.)
- 11:00 - 12:30 **SESSION 24: FORECAST EVALUATION AND COMBINATION (CENTRAL 4B)**
Chair: Ming Lo (St. Cloud State University)
- Weighted Likelihood Ratio Scores for Evaluating Density Forecasts in Tails
Cees Diks (CeNDEF, University of Amsterdam)
Valentyn Panchenko (University of New South Wales)
Dick van Dijk (Erasmus University Rotterdam)
- Multivariate Forecast Evaluation and Rationality Testing
Michael Owyang (Federal Reserve Bank of St. Louis)
Ivana Komunjer (UCSD)
- Time-Varying Combination of Volatility Forecasts: An Empirical Analysis for the Mexican Peso-US Dollar Exchange Rate
Carlos Capistrán, Banco de Mexico
Guillermo Benavides, Banco de Mexico
- 12:30 – 14:00 **LUNCH (MARKET STREET DINING ROOM, 4TH FLOOR)**

- 14:00 - 15:30 **SESSION 25: INTERNATIONAL MACRO (4 EAST)**
 Chair: Frederique Bec (CREST and THEMA University of Cergy-Pontoise, France)
- International Real Business Cycles and the Real Exchange Rate: A Nonlinear Perspective
 Themis Pavlidis (Lancaster University Management School)
 Ivan Paya (Lancaster University Management School)
 David Peel (Lancaster University Management School)
- Monetary Policy in a Small Open Economy
Enrique Martinez-Garcia (Federal Reserve Bank of Dallas)
- Instability and Nonlinearity in the Euro Area Phillips Curve
Alberto Musso (ECB)
 Livio Stracca (ECB)
 Dick van Dijk (Erasmus University Rotterdam)
- 14:00 - 15:30 **SESSION 26: NONLINEAR TIME SERIES II (4 WEST)**
 Chair: Chiara Peroni (University of East Anglia)
- Autocontours: Dynamic Specification Testing
 Gloria Gonzalez-Rivera (University of California, Riverside)
 Zeynep Senyuz (University of California, Riverside)
 Emre Yoldas, University of California, Riverside
- Factor Decomposition of Varma Models Based on Weighted Forecast-Error Covariances: Applied to Forecasting Quarterly U.S. GDP at Monthly Intervals
Baoline Chen (Bureau of Economic Analysis)
 Peter A. Zadrozny (Bureau of Labor Statistics)
- A Threshold Model for Firms' Investment over the Business Cycle
Juri Marcucci (Bank of Italy)
 Francesca Lotti (Bank of Italy)
- 14:00 - 15:30 **SESSION 27: NONLINEAR MACRO (CENTRAL 4A)**
 Chair: Michael Owyang (Federal Reserve Bank of St. Louis)
- Estimating Nonlinear DSGE Model Using Approximate Likelihood Functions
Giuseppe Ragusa (UCI)
 Raffaella Giacomini (UCL)
 Barbara Rossi (Duke University)
- Statistical Contributions of Business Cycle Indicators in Nowcasting Business Cycle Regimes
Arabinda Basistha (West Virginia University)
- Yield Curve in an Estimated Nonlinear Macro Model
Taeyoung Doh (Federal Reserve Bank of Kansas City)

14:00 - 15:30 **SESSION 28: NUISANCE PARAMETERS AND ARCH/GARCH (CENTRAL 4B)**

Chair: Katja Ahoniemi (Helsinki School of Economics)

Valid Inference for a Class of Models Where Standard Inference Performs Poorly; Including Nonlinear Regression, ARMA, GARCH, and Unobserved Components

Jun Ma (University of Alabama)

Charles R. Nelson (University of Washington)

On the Origins of Conditional Heteroscedasticity in Time Series

Richard Ashley (Virginia Tech)

The Persistence in Inflation and Output Growth and the Importance of the Latter for the Performance-Uncertainty Link

Menelaos Karanasos (Brunel University)

Ning Zeng (Brunel University)

15:30 – 16:00 **COFFEE/TEA (EAST GARDEN COURT LOBBY, 4TH FLOOR)**

16:00 - 17:30 **SESSION 29: CRAIG HIEMSTRA MEMORIAL LECTURE (CENTRAL 4)**

Regional Business Cycles

James D. Hamilton (University of California, San Diego)