FABIO FRANCO

Address - Sonnemannstrasse 20
60314 Frankfurt am Main
Germany

Phone: +39 3333227601
E-mail: fabio.franco3137@gmail.com
www.fabiofranco.org

CURRENT POSITION

PhD Trainee

European Central Bank - DG/MP Monetary Policy Strategy Division
February 2018 - Present — Frankfurt

PAST POSITIONS

Visiting Researcher - Advisor A. Ronald Gallant

Pennsylvania State University - Department of Economics
October 2017 - April 2018 — State College

Teaching Assistant

University of Rome Tor Vergata - Department of Economics and Finance
October 2016 - May 2017 — Rome

Accountant

Accounting Association Cassino
October 2012 - November 2014 — Cassino

Professional Kayaker

Sport Group of Marina Militare Italiana
September 2003 - May 2005 — Sarzana

EDUCATION

Ph.D. - Economics and Finance

University of Rome Tor Vergata - Department of Economics and Finance
September 2015 - April 2019 Rome

EIEF Graduate Program - Econometrics

Einaudi Institute for Economics and Finance - Bank of Italy
September 2015 - July 2016 Rome

Graduate Program - Economics

University of Rome Tor Vergata - Department of Economics and Finance
September 2014 - September 2015 Rome

M.A. - Economics

University of Cassino and Southern Lazio - Department of Economics
January 2011 - November 2013 Cassino

B.A. - Business Administration

University of Cassino and Southern Lazio
October 2005 - November 2010 Cassino

OTHER RELEVANT COURSES AND ACTIVITIES

Dynamic factor models - Prof. Marco Lippi
EIEF - June 2016, Rome

Reading group in econometrics - Weekly econometric seminars
LUISS University - Spring 2016, Rome

Advanced Bayesian econometrics - Prof. Dimitris Korobilis
University of Rome Tor Vergata - Spring 2016, Rome

Advanced Time series analysis - Prof. Andrew Harvey
University of Rome Tor Vergata - Spring 2016, Rome

PROGRAMMING LANGUAGES & OTHER SKILLS

- Julia, Matlab, C++, R, Stata
- Languages: Italian, English

RESEARCH FIELDS

- Macroeconometrics
- Time series
- Bayesian econometrics
- Economic forecasting
- Nonlinear structural models
- Nonlinear estimation

Ph.D. THESIS

"Particle filtering based on GMM likelihood representation"

Advisor: Prof. Giuseppe Ragusa

General description. Evaluation and enhancement of nonlinear/non-Gaussian filtering methods to improve the assessment of structural nonlinear dynamic models via particle Markov Chain Monte Carlo methods. Practical application: estimation of DSGE and stochastic volatility models.

CURRENT RESEARCH

"Likelihood Induced by Moment Functions: a comparison with the Standard Simulated Likelihood using particle filtering"

General description. Performance evaluation of particle filter constructed upon a GMM likelihood representation relative to the standard techniques: standard linear Kalman filter and bootstrap particle filter.

"Efficient Particle MCMC with GMM likelihood representation"

General description. Revising of particle GMM algorithm to reduce the depletion of particle weights and in turn deliver more reliable MCMC estimates of structural nonlinear models.

"Markov Regime Switching model. An alternative seminonparametric inference approach"

General description: seminonparametric density is used to assess Markov regime switching models without relying on the structural form of the measurement equation. Practical application: estimation of the real business cycle to evaluate the impact of idiosyncratic shocks.

"Calibrating monetary policy rules to semi-structural estimates of the natural rate of interest"

General description. Historical simulations on a semistructural model (or structural trend plus cycle) are performed in order to identify the economic impact of different monetary policy strategies under the ELB.

"Predicting inflation as measure of output gap with disaggregated data"

General description. An unobserved components model relying on the Phillips Curve and the output gap dynamic with disaggregated data is proposed in order to better explain the underlying inflation dynamic and deliver in turn more reliable forecasts.

OTHER RESEARCH EXPERIENCES

- Technical support in assessing semistructural and term structural models at the European Central Bank.
- Technical support in developing efficient algorithms in Matlab and C++ language at the European Central Bank.