



NEWSLETTER

No. 01

14. January 2015

**Humboldt-Universität zu Berlin
Collaborative Research Center 649
Spandauer Straße 1
10178 Berlin – Germany**

**Editorial:
CRC 649 Office
Phone: +49 30 2093 5708
Fax: +49 30 2093 5617
E-Mail: sfb649@wiwi.hu-berlin.de**

Office: Room 309

<http://sfb649.wiwi.hu-berlin.de>

REGULAR RESEARCH SEMINARS

An overview is available at:

<http://sfb649.wiwi.hu-berlin.de/fedc/seminars.php>

ECONOMIC RISK SEMINAR

Location: Spandauer Str. 1, room 23

Time: every Monday, 2.00 – 4.00 p.m.

SCHUMPETER SEMINAR

Location: Spandauer Str. 1, room 23

Time: every Tuesday, 4.00 – 6.00 p.m.

WIAS RESEARCH SEMINAR MATHEMATICAL STATISTICS

Location: Weierstrass Institute for Applied Analysis and Stochastics,
Mohrenstraße 39, 10117 Berlin, Erhard-Schmidt-Hörsaal

Time: every Wednesday, 10.00 – 12.00 a.m.

CURRENT EVENTS

More information can be found here:

http://sfb649.wiwi.hu-berlin.de/fedc/events_actual.php

15.-18. Jan. 2015

Econ Boot Camp 2015

Location: CRC649, HU Berlin

21. Jan. 2015

Jour Fixe Winter 2015

Location: CRC649, HU Berlin

Time: 14.00 – 17.00 p.m.

27. - 31. Jan. 2015

Haindorf 2015

Location: Hejnice, Czech Republic

NEWS OF THE CRC

3. December 2014

Nobel Prize Lecture

The CRC 649 "Economic Risk" invited to the annual Nobel Prize Lecture, which took place in the Heilig-Geist-chapel at the school of business and economics of Humboldt-Universität zu Berlin, dedicated to Jean Tirole of Toulouse University in France. He has been awarded the prize for his vast and comprehensive microeconomic research investigating optimal level of regulation of firms in order to prevent consumers being badly affected by their monopolistic behaviour. Prof. Dr. Roland Strausz presented an



overview of Jean Tirole's interesting life and work, and pointed out how important his work is to today's economic understanding and regulatory policy.

This 9th annual Nobel Prize Lecture was kindly supported by the society for economics and management at Humboldt University Berlin. The event was well-attended and also perceived very positively among the guests. As in past years, the annual Nobel Prize Lecture drew attendees from the general public and offered a reception for a continued exchange of ideas.

16. December 2014

Hilda-Geiringer-Lecture 2014



The CRC 649 "Economic Risk" invited to the Hilda Geiringer-Lecture on the 16th of December to honor the mathematical and statistical contributions of Hilda Pollaczek-Geiringer. She was the first woman to receive an academic appointment in mathematics at the University of Berlin in the 1920's and therefore is a role model for women in science.

This year the Hilda-Geiringer-Lecture 2014 was held by Prof. Annette Vogt. She held an excellent lecture with the title: "Statistics in Berlin and the work of Hilda Pollaczek-Geiringer". We are also

honored to announce, that this was also the inaugural lecture of Prof. Annette Vogt for a honorary professorship at the Humboldt-Universität zu Berlin. We wish her further success for her research!



NEWS OF THE PROJECTS

Ulrich Horst (A11) co-organized the workshop "Topics in Information Economics" at the University Paris Dauphine on the 16th and 17th of December 2014.

Wolfgang Härdle (B1) has given a talk on his research focus "Risiko-bewertung" in the context of the workshop on High Dimensional, High Frequency and Spatial Data at the Karlsruher Institut für Technologie KIT. The podcast is available [here](#).

Andrija Mihoci (B1) presented during his research stay at the Singapore Management University his work on "Local Adaptive Multiplicative Error Models for High-Frequency Forecasts". In Sydney he attended the Quantitative Methods in Finance conference organized by the University of Technology Sydney. There he gave a talk "Adaptive Order Flow Forecasting with Multiplicative Error Models".

Piotr Majer (B1) defended his thesis on "Dynamic Semiparametric Factor Model in Applications to fMRI and Interest Rates". Congratulations!

Alexander Ristig (B10) participated at the 8th International Conference on Computational and Financial Econometrics hosted by the University of Pisa, 6th to 8th of December 2014. He presented the joint project with **Ostap Okhrin (B10)**, Jeffrey Sheen and Stefan Trück both from Macquarie University on „Investigating Financial Contagion with Copulae“. Furthermore, Alexander visited the Department of Statistics and Operations Research of the University of Vienna for intensifying collaborations between the involved universities.

Michael C. Burda (C7) gave a talk on "Payroll Taxes, Social Insurance and Business Cycles" in the Economics Seminar at the Department of Economics at Tulane University in New Orleans on 1th of December 2014. On 4th of December 2014 he visited the Peterson Institute for International Economics in Washington and presented his paper "German Labor Miracle, Wage Compression, and Related Issues". Michael Burda gave a talk on "Payroll Taxes, Social Insurance and Business Cycles" in the CIREQ-McGill Seminar at the Centre Interuniversitaire de Recherche en Économie Quantitative at Mc Gill University in Montreal on 5th of December 2014. On 11th of December 2014 he visited the Department of Finance at Maastricht University and presented his paper "Payroll Taxes, Social Insurance and Business Cycles" in the Finance Seminar.

Alexander Meyer-Gohde (C7) organized the session "Advances in DSGE Modelling" at the 8th International Conference on Computational and Financial Econometrics (CFE 2014) in Pisa, Italy, where he also presented his work on "Risk-Sensitive Linear Approximations" and his joint work with **Daniel Neuhoff (C7)** entitled "Generalized Exogenous Processes in DSGE".

Steffen Ahrens (C10) participated at the Fall Meetings of the Midwest Macroeconomics Conference at Florida International University in Miami, Florida, USA, from 7th to 9th of November and presented his paper "Layoff Taxes, Unemployment Insurance, and Business Cycle Fluctuations" (joint with **Nooshin Nejati (C10)** and **Philipp L. Pfeiffer (C10)**).

Philipp Pfeiffer (C10) participated in the IAB Graduate School's 7th interdisciplinary Ph.D. workshop on Perspectives on (Un-) Employment in Nurnberg, 4th to 5th of December 2014, and presented his paper "Layoff Taxes, Unemployment Insurance, and Business Cycle Fluctuations" co-authored with Steffen Ahrens and Nooshin Nejati (both C10).

Markus Bibinger (C12) has been invited to present joint work with **Lars Winkelmann (C14)** at the CFE-ERCIM conference at Pisa on the 8th of December 2014.

Markus Reiß (C12) has been invited to give a presentation at the CFE-ERCIM conference at Pisa on the 6th of December 2014.

Till Strohsal (C14) presented his paper "Assessing the Anchoring of Inflation Expectations" co-authored with Lars Winkelmann at the 8th International Conference on Computational and Financial Econometrics on 7th of December 2014 in Pisa (Italy).

Helmut Lütkepohl (C15) participated in the 8th International Conference on Computational and Financial Econometrics in Pisa, Italy, from 6th – 8th of December 2014 and presented a joint paper with **Aleksei Netsujev (C14)** entitled Structural Vector Autoregressions with Smooth Transition in Variances - The Interaction Between U.S. Monetary Policy and the Stock Market

Lars Winkelmann (C14) visited the Department of Economics at the University of Melbourne from 24th of November to 12th of December. He gave seminars on "Cojumps in high-frequency data and the yield curve" at Macquarie University Sydney on 1st of December and Monash University Melbourne on 8th of December 2014. Lars Winkelmann presented the paper "Forward guidance and the predictability of monetary policy - a wavelet based jump detection approach" on the "1st Conference on Recent Developments in Financial Econometrics and Applications" at Deakin University Geelong from 4th to 5th of December 2014.

GUESTS OF THE CRC 649

You find a summary about all guests here:

http://sfb649.wiwi.hu-berlin.de/fedc/guests_actual.php

01.09.2014 **Tan, Frank**
– University College Dublin (IR)

31.01.2015
Project: *Co-movements of idiosyncratic volatilities in G7 countries*

Spandauer Str. 1, room 311
Phone: 030-2093-1470
E-Mail: frank.tan@ucdconnect.ie



01.09.2014 **Paulus, Michael**
– Charles University in Prague (CZ)

31.01.2015
Project: *International trade with specific concern about gravity models and role of institutions (e.g. corruption) in international trade, fiscal policies and macroeconomics, philosophy of economics*

Spandauer Str. 1, room 318
Phone: 030-2093-5895
E-Mail: michal.paulus@seznam.cz



01.11.2015 **Yun-Cheng, Tsai**
– National Taiwan University (TW)
29.02.2016

Project: *Risk management, derivative pricing, high-frequency trading data analysis, computational finance*

Spandauer Str. 1, room 318
Phone: 030-2093-5895
E-Mail: d98922012@ntu.edu.tw



15.01. – **Lu, Meng-Jou**
14.02.2015 National Chiao Tung University (TW)

Project: *Risk management, quantitative finance, derivatives*

Spandauer Str. 1, room 318
Phone: 030-2093-5895
E-Mail: mangrou@gmail.com



26.01. – **Yao, Qiwei**
31.01.2015 London School of Economics and Political Sciences (GB)

Project: *Modelling high-dimensional time series*

Spandauer Str. 1, room 318
Phone: 030-2093-5895
E-Mail: Q.Yao@lse.ac.uk



NEW DISCUSSION PAPERS

- 2015-001** "Pricing Kernel Modeling" by Denis Belomestny, Shujie Ma and Wolfgang Karl Härdle, January 2015.
- 2015-002** "Estimating the Value of Urban Green Space: A hedonic Pricing Analysis of the Housing Market in Cologne, Germany" by Jens Kolbe and Henry Wüstemann, January 2015.
- 2015-003** "Identifying Berlin's land value map using Adaptive Weights Smoothing" by Jens Kolbe, Rainer Schulz, Martin Wersing and Axel Werwatz, January 2015.

PUBLICATIONS

Härdle, W., Ritov, Y. and Wang, W. (2015)

Tie the straps: Uniform bootstrap confidence bands for bounded influence curve estimators.

Journal of Multivariate Analysis

doi:10.1016/j.jmva.2014.11.003

Nautz, D. and Strohsal, T. (2015)

Are US Inflation Expectations Re-Anchored?

Economics Letters

DOI: 10.1016/j.econlet.2014.12.023

QUANTLETS

In 2014 a total of 443 Quantlets were uploaded.

More detailed information is available [here](#).

Project: DSFM

Modeling for high-dimensional data is a challenging task in statistics especially when the data comes in a dynamic context and is observed at changing locations with different sample sizes. Such modeling challenges appear in many different fields, e.g. macroeconomics, finance, neuroeconomics, etc.

The dynamic semiparametric factor model (DSFM) is a combination of methods from functional principal component analysis and backfitting techniques for additive models. DSFM smooths in time and space simultaneously, approximating complex dynamic structures by basis functions and a time series of loading coefficients. It was introduced by Fengler, Härdle and Mammen in 2007 in application to implied volatility surfaces dynamics.

The project [DSFM](#) summarizes the R and MatLab codes on Quantlet based on three journal papers from Ladislaus von Bortkiewicz Chair of Statistics:

- Härdle W., Silyakova E. (2012). Implied Basket Correlation Dynamics. [SFB 649 DP 2012-066](#)
- Härdle, W. K., Majer, P. (2014). Yield Curve Modeling and Forecasting using Semiparametric Factor Dynamics. [SFB 649 DP 2012-48](#), *The European Journal of Finance*,

DOI: [10.1080/1351847X.2014.926281](https://doi.org/10.1080/1351847X.2014.926281)

- Majer, P., Mohr, P., Heekeren, H., Härdle, W. K. (2014). Portfolio Decisions and Brain Reactions via the CEAD method. [SFB 649 DP 2014-36](#)

With the Quantlet of DSFM project, the main results of these papers could be replicated.

The quantlet [DSFM_YC](#) estimates DSFM model for term structure of interest's rates with B-spline basis functions for Italian zero-coupon bonds from January 1999 to March 2012.

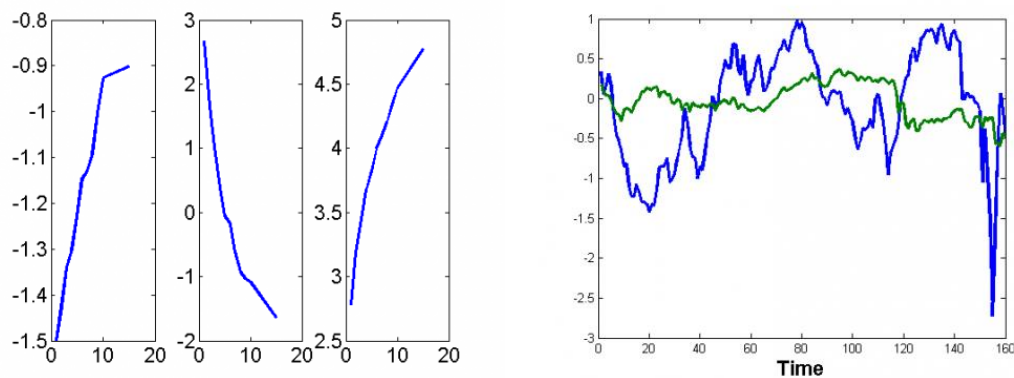


Figure 1: Estimated factors of the yield curve depending on time to maturity [Years] using the domestic DSFM approach with two factors

Figure 2: Estimated factor loadings of the yield curve over whole sample using the domestic DSFM with two factors

QUOTE OF THE MONTH

"There is nothing permanent except change."

Heraclitus (535-475 BCE)

Please also note that the newsletter is published on the homepage of the CRC 649.

**The CRC 649 – Newsletter is published at the beginning of each month.
Editorial deadline for the second Newsletter 2015 is 30.01.2015.**