

Evgenii Vladimirov

Email: e.vladimirov@uva.nl
Phone: +31 6 819 31539
Website: www.evladimirov.com

Address: Roeterstraat 11
1018 WB, Amsterdam
The Netherlands

Education

- 2019 – present **PhD candidate in Financial Econometrics**
University of Amsterdam and Tinbergen Institute, Netherlands
Supervisors: Prof. H. Peter Boswijk and Prof. Roger J. A. Laeven
- May 2022 **Visiting Scholar**
Kellogg School of Management, Northwestern University, USA
Hosts: Prof. Torben G. Andersen and Prof. Viktor Todorov
- 2017 – 2019 **MPhil in Economics** (Advanced Econometrics track)
Tinbergen Institute, Netherlands
Thesis: “Jump Contagion among Stock Market Indices: Evidence from Option Markets”
- 2015 – 2017 **MA in Financial Economics**
European University at Saint Petersburg, Russia
Thesis: “Systemic risk and vulnerability of the sectors in Russian economy”
- 2010 – 2015 **MSc in Applied Mathematics and Computer Science**
Saint Petersburg State University, Russia
Thesis: “The Scenario Approach to the Development of Modeling of an Enterprise Using Credit Resources”

Research interests

Primary fields: financial econometrics, option pricing, quantitative finance
Secondary fields: machine learning, asset pricing, time series econometrics

Job Market Paper: Estimating Option Pricing Models Using a Characteristic Function-Based Linear State Space Representation. [Link to the latest version](#)

We develop a novel filtering and estimation procedure for parametric option pricing models driven by general affine jump-diffusions. Our procedure is based on the comparison between an option-implied, model-free representation of the conditional log-characteristic function and the model-implied conditional log-characteristic function, which is functionally affine in the model’s state vector. We formally derive an associated linear state space representation and establish the asymptotic properties of the corresponding measurement errors. The state space representation allows us to use a suitably modified Kalman filtering technique to learn about the latent state vector and a quasi-maximum likelihood estimator of the model parameters, which brings important computational advantages. We analyze the finite-sample behavior of our procedure in Monte Carlo simulations. The applicability of our procedure is illustrated in two case studies that analyze S&P 500 option prices and the impact of exogenous state variables capturing Covid-19 reproduction and economic policy uncertainty. (jointly with H. Peter Boswijk, Roger J. A. Laeven)

Selected presentations: ESEM (2022), SoFiE (2022), IAAE (2022), QFFE (2022), Kellogg (2022)

Working Papers

Jump Contagion among Stock Market Indices: Evidence from Option Markets (2021).
University of Amsterdam. (jointly with H. Peter Boswijk, Roger J. A. Laeven and Andrei Lahu) [SSRN](#)

Work in Progress

iCOS: Option-Implied COS Method.

Characteristic Function-Based Factor Modelling of Affine Jump Diffusions Using Options. (jointly with Peter Boswijk, Roger Laeven and Niels Marijnen)

Autoencoder Option Pricing Models. (jointly with Gustavo Freire)

Publications (Pre-graduate)

Mapping the stocks in MICEX: Who is central in Moscow Stock Exchange? (2020). *Economics of Transition and Institutional Change*, 28(4), 581-620. (jointly with Hakan Eratalay)

Systemic Risk of Russian Economy (2017). *Finance and Business*, 2017-4, p.71-83 (in Russian)

The Scenario Approach to the Development of Modeling of an Enterprise Using Credit Resources (2014). *The XLV annual international conference on Control Processes and Stability*, 458-464 (jointly with Smirnov N.V., in Russian)

Professional Experience

March–Aug 2015 Data Analyst at 585 Gold Company, Jewelry Retail Chain, Russia
Processed and forecasted data on sales and stocks, constructed price models

2013 – 2014 Tutor of Mathematics
Taught mathematics to school students to prepare them for final exams

Additional Education

June 2022 Quantitative Finance and Financial Econometrics (QFFE) School, France

August 2021 SoFiE Summer School “Machine Learning in Finance”

July 2021 SoFiE Summer School “The Econometrics of Derivatives Markets”

August 2020 13th European Summer School in Financial Mathematics, Vienna

August 2016 26th Jyvaskyla Summer School, Finland
Courses: Data Mining for Data Science, Online Social Media Analytics

March 2016 5th Spring School on Risks, Insurance and Finance in Saint Petersburg

Scholarships and Awards

2017 – 2019 Full Fee Waiver Scholarship and Individual Scholarship
Tinbergen Institute, Netherlands

Dec 2017 “Best graduate thesis in economics 2017” award
Gaidar Institute for Economic Policy, Russia

2015 – 2017 Full Fee Waiver Scholarship and Individual Scholarship
European University at Saint Petersburg, Russia

March 2017 Vladimir Potanin Fund Scholarship
V. Potanin Foundation, Russia

Feb 2016–Jan 2017 Scholarships for the best academic results at the European University at St. Petersburg
Charity Fund for children and young people “Stupeni”, Russia

- Nov 2016 Scholarship for excellent academic results and research activities at the European University at St. Petersburg
Commercial bank "Gazprombank", Russia
- April 2016 Winner of the second Russian Challenge of Applied Econometrics
Bashkir State University, Ufa, Russia
- Jan 2014–June 2015 Advanced scholarships for excellent academic results and active participation in extracurricular activities
Saint Petersburg State University, Russia

Teaching Assistance

- 2020 - 2022 Computational Finance in Python (*UvA, MSc*)
- 2019 - 2022 Life Insurance Mathematics (*UvA, BSc*)
- 2020 - 2022 MSc and BSc student thesis supervision (*UvA, BSc and MSc*)
- 2019 Machine Learning in Econometrics (*UvA, MSc*)
- 2019 Asset Pricing (*Tinbergen Institute, MPhil*)
- 2018 Principles of Programming in Econometrics (*Tinbergen Institute, MPhil*)
- 2018 Financial Markets, Programming in Python (*Amsterdam Business School*)

Seminars and Conferences

- 2022 33rd (EC)² conference, *ESSEC Business School, Paris* (9-10 Dec)
Econometrics PhD conference, *Erasmus University Rotterdam* (7-8 Nov)
DynStoch 2022, *Institut Henri Poincaré, Paris* (29 June - 1 July)
14th Annual SoFiE conference, *University of Cambridge* (24-26 June)
8th Annual IAAE conference, *King's College London* (21-24 June)
QFFE conference, *Aix-Marseille Université* (16-17 June)
Kellogg FINC Quantitative Seminar, *Northwestern University* (27 May)
Seminar at CEBA, *St. Petersburg State University* (online, 4 Feb)
- 2021 UvA Econometrics Seminar, *University of Amsterdam* (29 Oct 2021)
iCEBA conference at St.Petersburg (online, July)
SoFiE Summer School "The Econometrics of Derivatives Markets" (online, June)
IAAE annual conference 2021 (online, June)
13th Annual SoFiE conference (online, June)
- 2020 Econometric Society World Congress 2020 (online, Aug)
St. Petersburg Economic seminar (online, Oct)
PhD Lunch Seminar, *University of Amsterdam* (Feb)
- 2019 PhD Colloquium, *Cass Business School, London* (Dec)
Econometrics Lunch Seminar, *University of Amsterdam* (Oct)
- 2017 Annual INFER Conference, *Bordeaux, France* (June)
Workshop, *High School of Economics in St. Petersburg* (March)
Perm Winter School in Risk Management and Finance, *Russia* (Feb)
Student Economic Seminar in British Consulate General in St. Petersburg (Feb)
Research Seminar, *European University at St. Petersburg* (Dec)

Extra-curricular Activities

- 2015 – 2017 Faculty group monitor at European University at Saint Petersburg

June 2016 Volunteer of Saint Petersburg International Economic Forum 2016
2012 - 2015 Organizer of main university events at Saint Petersburg State University

Additional Skills

Computer Skills: Python, Julia, MatLab, R, EViews, SQL
LaTeX, MS Excel, Word, Access

Languages: English – fluent, Dutch – pre-intermediate, Russian – native

Placement Team

Placement director: Eric Bartelsman (e.j.bartelsman@vu.nl)

Placement assistant: Arianne de Jong (a.de.jong@tinbergen.nl)

References

Peter Boswijk

Professor of Financial Econometrics
Vice-Dean and Chair
Amsterdam School of Economics
University of Amsterdam
H.P.Boswijk@uva.nl

Roger Laeven

Full Professor
Chair of Mathematics and Economics of Risk
Amsterdam School of Economics
University of Amsterdam
R.J.A.Laeven@uva.nl

Torben Andersen

Nathan S. and Mary P. Sharp Professor of
Finance
Kellogg School of Management
Northwestern University
t-andersen@kellogg.northwestern.edu

Viktor Todorov

Harold H. Hines Jr. Professor of Risk
Management
Kellogg School of Management
Northwestern University
v-todorov@kellogg.northwestern.edu