# ${\bf Grigory\ Vilkov,\ Ph.D.}$

Авоит	vilkov@vilkov.net   www.vilkov.net   SSRN   Scholar   Linked	In   OSF Data
Academic Experience	Frankfurt School of Finance & Management Professor of Finance	2014 - present
	University of Mannheim Visiting Professor of Finance	2013-02/2014
	Goethe University Frankfurt EUREX Endowed Assistant Professor for Derivatives	2008 - 2014
EDUCATION	Goethe University, Frankfurt Habilitation INSEAD, Fontainebleau, France, MS, PhD in Finance W.E.Simon Graduate School of Business Administration, M Finance Academy of the Government of Russia, Diploma	2012 2008 IBA 2001 1996
Professional Experience	SciFund LP, USA, Founding Partner Quantitative trading, volatility, dispersion and Delta-one products.	2016 - present
	<b>Zircon Computing LLC</b> , USA, Founding Partner High-performance computing platform development. Algorithmic trading, financial engineering.Contract with a major Wall Street firm	2007 - 2014 m.
	Agate Algo LLC, USA, Founding Partner Adapting Zircon Computing framework to quantitative trading. Implementation of dispersion trading in U.S. equity markets.	2007 - 2014
	Securitisation Consulting GmbH, Germany, Managing Partner Consulting on collaterized debt securities.  Platform development for accounting and analysis of CDOs/MBSs.	2007 - 2021
	Avtobank / Technobank, Moscow, FX Derivatives Trader	1995 - 1997
Professional Affiliations	Global Association of Risk Professionals Professional Risk Management Association	2002 - present 2004 - present
RESEARCH	My research focuses on portfolio construction by building better expectations of risks, returns, and of their dynamics. It has multiple implementations in practice: implied betas by IvyDB OptionMetrics, implied skewness used as a cross-sectional stock characteristic, climate change exposure measure extracted from earning calls, and others. Currently, I work on factor dispersion, factor rotation, non-myopic asset allocation strategies with implied data, and on using ML in options analysis.	
	The Price of Correlation Risk: Evidence from Equity Options, J.Driessen and P.Maenhout. <i>Journal of Finance</i> , 2009.	
	Measuring Equity Risk Option-Implied Correlations, A.Buss. Review of Financial Studies, 2012.	
	Improving Portfolio Selection Using Option-Implied Volatility and Skewness, V.DeMiguel, Y.Plyakha and R.Uppal. <i>Journal of Financial and Quantitative Analysis</i> , 2013.	
	The Intended and Unintended Consequences of Financial Market Regulations: A General Equilibrium Analysis, A.Buss, B.Dumas and R.Uppal. <i>Journal of Monetary Economics</i> , 2016.	
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Non-myopic Betas, S.Malamud. Journal of Financial Economics, 2018.

Asymmetric Volatility Risk: Evidence from Option Markets, J.Jackwerth,

Review of Finance, 2019.

Carbon Tail Risk, E.Ilhan and Z.Sautner. Review of Financial Studies, 2021.

Equal or Value Weighting? Implications for Asset-Pricing Tests, Y.Plyakha, R.Uppal, G.Vilkov, 2021.In: Zopounidis C., Benkraiem R., Kalaitzoglou I., Springer.

Generalized Bounds on the Conditional Expected Excess Return on Individual Stocks, F.Chabi-Yo and C.Dim. Management Science, 2023.

Firm-level Climate Change Exposure, Z.Sautner, L.v.Lent, R.Zhang. Journal of Finance, 2023.

Pricing Firm-level Climate Change Exposure, Z.Sautner, L.v.Lent, R.Zhang. Management Science, 2023.

Dispersion of Beliefs Bounds: Sentimental Recovery, A.Pazarbasi and P.Schneider, 2024. Forthcoming in Management Science.

Non-standard Errors, A.Menkveld et al. within a Finance Crowd Analysis Project, 200+ co-authors/limited individual contribution!, Journal of Finance, 2023.

Working Papers **ODTE Trading Rules**, 2024

ODTEs: Trading, Gamma Risk and Volatility Propagation, with C.Dim and B.Eraker, 2024

Climate Value and Values Discovery in Earnings Calls, with Z.Sautner, L.v.Lent, and R.Zhang, 2023.Data: https://osf.io/5amjp/

Investor Sophistication and Portfolio Dynamics, with A.Buss and R.Uppal, 2023, R&R Review of Financial Studies.

Media Narratives and Price Informativeness, with C.Dim and F.Sangiorgi,

Factor Investing, Learning from Prices, and Endogenous Uncertainty in Asset Markets, with C.Dim and F.Sangiorgi, 2020.

Financial Innovation and Asset Prices, with A.Buss and R.Uppal, 2017.

Expected Stock Returns and the Correlation Risk Premium, with A.Buss and L.Schönleber, 2017.

Option-Implied Correlations, Factor Models, and Market Risk, with A. Buss and L.Schönleber, 2016.

#### In Progress

Factor and Sector Rotation: A Forward-looking Approach, with W.Schadner, 2024

Asymmetric Risk Timing, 2024

Market Herding, with E.Quaye, 2024

Factor Dispersions, with D.Gerchik, V.Ruffo, L.Schoenleber, 2024

# PERMANENT Working Papers 2017.

Asset Prices Driven by Stochastic String Shocks, with W.Distaso and A.Mele,

Where Experience Matters: Asset Allocation and Asset Pricing with Opaque and Illiquid Assets, with A.Buss and R.Uppal, 2014.

Comparing Different Regulatory Measures to Control Stock Market Volatility, with A.Buss, B.Dumas and R.Uppal, 2013.

Asset Prices in General Equilibrium with Recursive Utility and Illiquidity Induced by Transactions Costs, with A.Buss and R.Uppal, 2013.

Why Does an Equal-Weighted Portfolio Outperform Value- and Price-Weighted Portfolios?, with Y.Plyakha and R.Uppal, 2013.

Option-Implied Correlations and the Price of Correlation Risk, with J.Driessen and P.Maenhout, 2012.

Option-Implied Information and Predictability of Extreme Returns, with Y.Xiao, 2012.

CAPM with Option-Implied Betas: Another Rescue Attempt, with A.Buss and C.Schlag, 2008.

The Dynamics of Risk-Neutral Implied Moments: Evidence from

Individual Options, with A.Hansis and C.Schlag, 2008.

Risk-Neutral Skewness: Return Predictability and Its Sources, with Z.-Ur-Rehman, 2008.

Portfolio Policies with Stock Options, with Y.Plyakha, 2008.

Variance Risk Premium Demystified, 2008

Hedging Options in the Presence of Microstructural Noise, with D.Horn and E.Schneider, 2007.

#### Conferences

**2024** (including scheduled) 16th Annual SoFiE Meeting, Rio de Janeiro; Financial Intermediation Research Society (x2), Berlin; Western Finance Association Meeting, Honolulu; Cancun Derivatives Workshop; Bretton Woods Accounting and Finance Ski Conference; PHBS Finance Symposium (Peking); Workshop in Option Markets (Liverpool); Adam Smith ESG conference (Edinburgh).

2023 NBER Big Data and Securities Markets (Boston); QuantMinds (London); Cboe Risk Management Conference (Austin); 3rd Annual Bristol Financial Markets Conference (Bristol); European Finance Association Meeting (Amsterdam); Empirical Asset Pricing Meeting (VU Amsterdam); Keynote speech at Society for the Advancement of Management Workshop "Climate Risks and Net-Zero Solutions," Nottingham Business School.

**2022** Western Finance Association Meeting. Oregon; 14th Annual Imperial College London Hedge Fund Conference; 2022 Cancun Derivatives Workshop; American Finance Association Meeting, Boston.

2021 NBER Conference on Measuring and Reporting Corporate Carbon Footprints and Climate Risk Exposure; Conference on Markets and Economies with Information Frictions, Beijing; European Finance Association Meeting (online); Second Sustainable Finance Forum, Shanghai; Midwest Finance Association Meeting (online); Econometrics of Options Markets, Vienna

2020 CEPR Household Finance Seminar Series (online); Future of Financial Information Webinar Series (online); Sustainable Finance Research Seminar, University of Zurich (online); Virtual Derivatives Workshop (online); European Finance Association, Helsinki (online); IQ-KAP Symposium, Frankfurt (online); SFS Cavalcade North America (online); Q-Group Spring Conference, Miami

2019 2nd CUHK Derivatives and Quantitative Investing Conference, Hong Kong; Conference on Derivatives and Volatility, Chicago; Annual Conference of Canadian Derivatives Institute, Montreal; New Challenges in Insurance, Paris; European Commission Summer School on Sustainable Finance, Ispra; City University of Hong Kong International Finance Conference on Corporate Finance and Financial Markets; Western Finance Association Meeting, LA; 2nd World Symposium on Investment Research, New York; EC Conference on Promoting Sustainable Finance, Brussels; American Finance Association Meeting, Atlanta.

2018 and earlier Erasmus Initiative on the Dynamics of Inclusive Prosperity, Rotterdam; Financial Management Association International, San Diego; European Finance Association, Warsaw; 1st Asset Pricing Conference by LTI@UniTo, Turin; UBC Summer Conference, Vancouver; CEPR Third Annual Spring Symposium in Financial Economics, London; 10th World Congress of the Bachelier Finance Society, Dublin; Conference on Frontiers of Factor Investing, Lancaster; Financial Management Association European Conference, Norway; Swiss Society for Financial Market Research (SGF) Conference, Zurich; CEPR Third European Workshop on Household Finance, London; Adam Smith Asset Pricing (ASAP) Conference, London; BofAML Quant and Risk Premia Conference, Frankfurt; American Finance Association Meeting, Philadelphia; Eastern Conference on Mathematical Finance, New York; Annual Meeting of the Financial Management Association International, Boston; European Finance Association Meeting, Mannheim; Autumn Seminar Inquire Europe, Montreux; China International Conference in Finance, Hangzhou; SFS Cavalcade, Nashville; OptionMetrics User Conference, New York; European Finance Association Meeting, Oslo; China International Conference in Finance, Xiamen; Financial Intermediation Research Society (FIRS) Conference, Lisbon; INQUIRE Seminar "Illiquid assets and portfolio construction," Amsterdam; American Finance Associa-

tion Meeting, San Francisco; Carnegie-Rochester-NYU Conference on Public Policy, Pittsburgh; Northern Finance Association Meeting, Banff; European Finance Association Meeting, Vienna; Western Finance Association, Seattle; 8th Private Equity Findings Symposium (Coller Institute), London; Financial Intermediation Research Society (FIRS) Conference, Reykjavik; Seventh McGill Global Asset Management Conference, Montreal; Conference on Behavioral Aspects in Macroeconomics and Finance, Milan; IFSID-Third Conference on Derivatives, Montreal; European Finance Association Meeting, Lugano; BdF-ACPR-SoFiE conference "Systemic Risk and Financial Regulation," Paris; Western Finance Association, Monterey; 10th Journeé of the Foundation (Banque de France), Paris; 2014 FMA Asian Conference, Tokyo; OptionMetrics User Conference, New York; European Finance Association Meeting, Cambridge; SIFR Conference on Re-Thinking Beta, Stockholm; UBC Summer Finance Conference 2013, Vancouver; CEPR European Summer Symposium in Financial Markets, Gerzensee; The sixth annual Paul Woolley Centre conference, London; 30th International Conference of the French Finance Association, Lyon; Swiss Society for Financial Market Research, Zürich; OptionMetrics User Conference, New York; China International Conference in Finance, Chongqing; Endowment Asset Management Conference, Vienna: Cass Business School Asset Pricing Retreat, London; Annual Conference of the Multinational Finance Society, Krakow; American Finance Association, Chicago; European Finance Association, Frankfurt; SIFR, Asset Allocation and Pricing in the Light of the Recent Financial Crisis, Stockholm; CEPR European Summer Symposium in Financial Markets, Gerzensee; Western Finance Association, Victoria; 1st World Finance Conference, Portugal; Derivatives, Volatility & Correlation Conference, Warwick; Duke Asset Pricing Conference, NC; Swiss Society for Financial Market Research, Zürich; German Finance Association, Frankfurt; INQUIRE UK Autumn Seminar, Leeds; European Finance Association Meeting, Bergen; Annual Conference of the Multinational Finance Society, Crete; Adam Smith Asset Pricing (ASAP) Conference, London; Swiss Society for Financial Market Research, Lausanne: Humboldt-Copenhagen Conference, Berlin: Midwest Finance Association, Chicago; Eastern Finance Association, Washington; Paris Finance International Meeting, Paris; German Finance Association, Münster; Eastern Finance Association, Florida; Swiss Society for Financial Market Research, Zürich; Western Finance Association, Colorado; 10th Symposium on Finance, Banking, and Insurance, Karlsruhe; European Finance Association Meeting, Moscow; Adam Smith Asset Pricing (ASAP) Conference, London; INSEAD, Brownbag Seminar Series, Fontainebleau.

Conferences (discussions)

Western Finance Association Meeting, Honolulu, 2024; European Winter Finance Summit, 2024; 6th World Symposium on Investment Research, Boston, 2023; European Winter Finance Summit, 2023; FIRS, Budapest, 2022; European Winter Finance Summit, 2022; 9th HEC-McGill Winter Finance Workshop, 2022; Third Asset Pricing conference by LTI at the Collegio Carlo Alberto, Turin, 2020; European Finance Association, Helsinki, 2020; City University of Hong Kong International Finance Conference on Corporate Finance and Financial Markets, Hong Kong 2019; Eight Erasmus Liquidity Conference, Rotterdam 2019; SAFE Annual Conference, Frankfurt 2018; European Finance Association Meeting, Warsaw 2018; Annual Center for Financial Frictions (FRIC) Conference, Copenhagen 2018; European Finance Association Meeting, Mannheim 2017; European Winter Finance Summit, St. Anton 2017; CEPR Summer Symposium in Gerzensee, 2016; International Conference on Capital Markets (INSEAD), Fontainebleau 2016; European Winter Finance Summit, Davos 2016; Annual Conference in International Finance, London 2014; European Winter Finance Summit, Zermatt 2014; European Finance Association Meeting, Cambridge 2013; SIFR Conference on Re-Thinking Beta, Stockholm, 2013; European Winter Finance Summit, Obertauern 2013; European Finance Association, Copenhagen 2012; CEPR European Summer Symposium in Financial Markets, Gerzensee 2012; China International Conference in Finance, Chongqing 2012; Adam Smith Asset Pricing (ASAP) Conference, Oxford 2012; European Finance Association, Stockholm 2011; CEPR European Summer Symposium in Financial Markets,

Gerzensee 2011; European Finance Association, Frankfurt 2010; 4th Conference on Advances in the Analysis of Hedge Fund Strategies, London 2009; German Finance Association, Frankfurt 2009; European Finance Association Meeting, Bergen 2009; Annual Conference of the Multinational Finance Society, Crete 2009; Swiss Society for Financial Market Research, Lausanne 2009; Paris Finance International Meeting, Paris 2008; Eastern Finance Association, Florida 2008; Swiss Society for Financial Market Research, Zürich 2006; 10th Symposium on Finance, Banking, and Insurance, Karlsruhe 2005; European Finance Association Meeting, Moscow 2005.

# Invited Presentations

2017-2024 ADIA, Abu Dhabi; Arrowstreet Capital, Boston; Frontiers in Quantitative Finance, London; BlackRock, London; BlueCove, London; IE Business School, Madrid; Robeco, Rotterdam; University of Basel; Tsinghua University; Quantitative Fintech Research group at the University of Sussex Business School; KU Leuven; ESADE Business School; University of Edinburgh; ACPR Research Initiative, Banque de France; Fulcrum Asset Management, UK; University of Liverpool Management School; Xi'an Jiaotong Liverpool University; BI, Oslo; HEC Montreal; ES-SEC; Bank of Lithuania; HEC Paris; PanAgora Asset Management, Boston; Erasmus University, Rotterdam; Maastricht University, Maastricht; UNSW Australia Business School, Sydney; University of Technology Sydney, Sydney; University of Sydney Business School, Sydney; University of Balearic Islands, Palma de Mallorca; 2016 and earlier Deutsche Bundesbank, Frankfurt; Swiss Finance Institute @ EPFL, Lausanne; Goethe University Frankfurt, Frankfurt; VU University Amsterdam, Amsterdam; Frankfurt School of Finance & Management, Frankfurt; University of Lugano, Lugano; Luxembourg School of Finance, Luxembourg; Manchester Business School, Manchester; Banque de France, Paris; Swiss Finance Institute @ EPFL, Lausanne; University of Mannheim, Mannheim; PanAgora Asset Management, Boston; Frankfurt Institute of Advanced Studies, Frankfurt; Vietnamese-German University, Ho Chi Minh City; Bernstein Quant Conference, London; Vienna Seminar on Asset Management (VSAM), Vienna; University of Tilburg, Tilburg; BlackRock, London; University of Exeter Business School, Exeter; New Economic School, Moscow; University of Innsbruck, Innsbruck; Imperial College Business School, London; University of Zürich, Zürich; Vienna University, Vienna; Frankfurt Trust, Frankfurt; University of St.Gallen, St.Gallen; University of Mainz, Mainz; University of Piraeus, Athens.

# Refereeing Activity

Journal of Finance, Journal of Financial Economics, Review of Financial Studies, Journal of Finance, Review of Finance, Management Science, Journal of Economic Dynamics and Control, Operations Research, Journal of Econometrics, Financial Analysts Journal, Quarterly Journal of Finance, Journal of Banking and Finance, Journal of Empirical Finance, Journal of Futures Markets, Journal of Applied Econometrics, Journal of International Money and Finance, Annals of Operations Research, Schmalenbach Business Review, Bundesbank Working Paper Series.

#### PhD Committee

Chukwuma Dim (George Washington University), Altan Pazarbasi (Bilkent), Lorenzo Schönleber (Collegio Carlo Alberto), Adrian Buss (INSEAD), Christian Skov Jensen/external (Bocconi), Yuliya Plyakha (Luxembourg School of Finance), Denis Gorea (Bank of Canada), Claudia Schwarz (ECB), Oliver Bernt, Przemyslaw Stilger/external (Manchester), Michael Schneider, Manuela Schöner.

# Grants and Prizes

CBOE Options Institute S&P Dow Jones Indices Dispersion Research Grant, 2023 IQ-KAP Research Prize (ESG Special Award), 2020 Jack Treynor Prize, sponsored by the Q-Group, 2019 IFSID Grant (Montreal Institute of Structured and Derivatives) 2017 Finalist of the Dr.Richard A.Crowell Memorial Prize (by PanAgora) 2017 China International Conference in Finance Best Paper Award, 2017

Europlace Institute of Finance (EIF) and the Labex Louis Bachelier 2014

INQUIRE Europe 2014

Dauphine-Amundi Chair in Asset Management 2014

Finalist of the Dr.Richard A.Crowell Memorial Prize (by PanAgora) 2013

Sturm und Drang Prize, Goethe University Frankfurt 2012

Annual SPIVA Research Awards, First Prize 2011

Foundation Banque de France 2011

INQUIRE Europe 2010

# TEACHING EXPERIENCE

## INVESCO/ Frankfurt School, Frankfurt

Invesco's Scientific Investment Approach, 2022.

Invesco's Factor Investing Institute, 2018-2021.

Invesco's Global Factor Institute/Factor Investing Training Program, 2017.

Invesco's Scientific Investment Approach, 2017.

# Frankfurt School of Finance & Management, Frankfurt

Financial Products and Modeling, Master of Finance, lecture, 2014-2023.

Quant Trading and Financial Analysis with Python, Master of Finance, 2016-2023.

Portfolio Risk Management, Master of Finance, 2016-2017.

International Portfolio Management, Master of Finance, 2015-2017.

Finance II, BS, lecture, 2015.

Asset Pricing and Portfolio Management, Master of Finance, lecture, 2015.

# University of Mannheim, Mannheim

Discrete-Time Finance, M.S./Ph.D.level, lecture, 2013.

Empirical Asset Pricing, M.S./Ph.D.level, lecture, 2014.

Vietnamese-German University, Ho Chi Minh City

Orientation Finance, B.S., 2012.

### Goethe University Frankfurt, Frankfurt

Advanced Financial Economics, M.S./Ph.D.level, lecture, 2012, 2013.

Advanced Topics in Asset Pricing, M.S./Ph.D.level, lecture, 2011.

Empirical Asset Pricing, M.S./Ph.D.level, lecture, 2011, 2012, 2013.

Advanced Topics in Finance, M.S./Ph.D.level, lecture, 2010.

Empirical Asset Pricing II, M.S./Ph.D.level, lecture, 2009.

Dynamic Capital Market Theory, M.S./Ph.D.level, lecture, 2x 2008–2011.

Empirical Asset Pricing I, Ph.D.level, seminar, 2009.

Dynamic Capital Market Theory, M.S./Ph.D.level, TA, 2007.

Options: Theory and Empirics, M.S./Ph.D.level, seminar, 2007.

European School of Management and Technology, Berlin

Financial Markets, M.B.A.level, lecture, 2008.

INSEAD, Fontainebleau

 $Corporate\ Financial\ Policy,\ M.B.A.level,\ teaching\ assistant,\ 2004-2005.$