Semyon Malamud

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Personal
Born in Ukraine, May 12, 1980.
Swiss Citizen.
Married, three children.

Education

- *Ph.D. in Mathematics*, Swiss Federal Institute of Technology, Zurich, Switzerland, May 2006.
- *Diploma in Mathematics*, Donetsk National University, Donetsk, Ukraine, July 2001.

Employment

- *Senior Chair,* Swiss Finance Institute, October 2015-
- *Associate Professor of Finance (with tenure)*, Ecole Polytechnique Fédérale de Lausanne, October 2015- .
- *Assistant Professor of Finance,* Ecole Polytechnique Fédérale de Lausanne, August 2009-September 2015.
- *Junior Chair,* Swiss Finance Institute, August 2010-
- *Visiting Assistant Professor,* McCombs School of Business, University of Texas at Austin, January - June 2009.
- *Assistant Professor of Quantitative Risk Management*, ETH Zürich, August 2007 - August 2009
- *Postdoctoral Researcher*, ETH Zürich, Switzerland, November 2006 - July 2007

- *Quantitative Analyst*, Alinpa AG, Wollerau, Switzerland, August – October 2006.
- *Teaching Assistant*, ETH Zürich, Switzerland, October 2001 - July 2006

Editorial Boards

- *Co-editor*, Mathematics and Financial Economics
- *Associate Editor*, Journal of Mathematical Economics

Professional Activities

- Research Fellow, Bank for International Settlements
- Lamfalussy Fellow of the European Central Bank (2015)
- CEPR Research Fellow
- Member of the Program Committee: The Rothschild Caesarea Center Annual Conference (2013, 2014,2015); EFA (2012, 2014,2015,2016); Swiss Society of Financial Markets Research Conference (2015), WFA (2015,2016,2017)
- Ad-hoc referee for American Economic Review, American Economic Journal (Microeconomics), B.E. Journal of Theoretical Economics, Econometrica, Finance and Stochastics, Journal of Economic Theory, Journal of Finance, Journal of Financial Economics, Journal of Mathematical Economics, Mathematical Finance, Review of Economic Studies, Review of Finance, Review of Financial Studies

Teaching Experience

- *Quantitative Risk Management*, Ecole Polytechnique Fédérale de Lausanne, 2018-
- *Asset Pricing Under Asymmetric Information,* Ecole Polytechnique Fédérale de Lausanne, 2016-
- *Dynamic Corporate Finance,* Dublin City University, May 2012
- *Stochastic Calculus*, Ecole Polytechnique Fédérale de Lausanne, 2010-
- *Derivatives*, Spring Semester 2010, Ecole Polytechnique Fédérale de Lausanne
- *Mathematics for Financial Economics*, Ecole Polytechnique Fédérale de Lausanne, 2009-
- *Equilibrium Asset Pricing*, Spring Semester 2009, University of Texas at Austin
- *Foundations of Financial Economics,* Fall Semester 2007, ETH Zürich
- *Perturbation Methods in Modern Financial Economics,* Fall Semester 2007, University of St.Gallen

- *Unspanned Stochastic Volatility,* Spring Semester 2008, University of St.Gallen
- *Term Structure and Credit Risk Models,* Fall Semester 2008, ETH Zürich

IT skills
Matlab, C, R, Python

Languages
English, French, German, Russian.

Current Research Interests

- Liquidity and Market Frictions
- International Finance
- Information Economics
- Equilibrium Asset Pricing
- Over-the-Counter Markets
- Network Economics
- Corporate Finance
- Optimal Contracting and Security Design
- Macroeconomics

Grants and Awards

- Lamfalussy Fellow of the European Central Bank, 2015
- Joint INQUIRE Europe-INQUIRE UK prize, 2015
- CEPR Research Fellow, 2015-
- ETF Academy Award, 2015
- Europlace Institute of Finance Award, 2015
- Swiss National Science Foundation Starting Grant, CHF 1m, for 5 years
- Dauphine Amundi Prize in Asset Management, 2014
- INQUIRE Europe Research Grant, 2014
- Dauphine Amundi Prize in Asset Management, 2013
- INQUIRE Europe Research Grant, 2013
- Swiss Finance Institute Research Grant, 2013-2015

- Swiss National Science Foundation Grant, 2013-2014.
- NET Institute Summer Grant, August 2012

Publications in Financial Economics

1. Liquidity, Innovation, and Endogenous Growth, with Francesca Zucchi, *forthcoming in the* **Journal of Financial Economics**
2. Decentralized Exchange, with Marzena Rostek, **American Economic Review**, 2017, 107(11), 3320-3362
3. Non-Myopic Betas, with Grigory Vilkov, **Journal of Financial Economics**, 2018, 129(2), 357-381
4. Credit Market Frictions and Capital Structure Dynamics, with Julien Hugonnier and Erwan Morellec, **Journal of Economic Theory**, 2015, 157, 1130-1158
5. Capital Supply Uncertainty, Cash Holdings, and Investment, with Julien Hugonnier and Erwan Morellec, **Review of Financial Studies,** 2015, 28(2), 391-445.
6. Information Percolation in Segmented Markets, with Darrell Duffie and Gustavo Manso, **Journal of Economic Theory**, 2014, **153**, 1-32
7. Optimal Incentives and Securitization of Defaultable Assets, with Huaxia Rui and Andrew Whinston, **Journal of Financial Economics**, 2013, **107(1)**, 111-135.
8. Endogenous Completeness of Diffusion Driven Equilibrium Markets, with Julien Hugonnier and Eugene Trubowitz, **Econometrica**, 2012, **80**, 1249-1270.
9. Financial Markets Equilibrium with Heterogenous Agents, with Jaksa Cvitanic, Elyes Jouini and Clotilde Napp, **Review of Finance**, 2012, **16(1)**, 285-321.
10. Price Impact and Portfolio Impact, with Jaksa Cvitanic, **Journal of Financial Economics**, 2011, **100(1)**, 201-225.
11. The Relative Contributions of Private Information Sharing and Public Information Releases to Information Aggregation, with Darrell Duffie and Gustavo Manso, **Journal of Economic Theory,** 2010, **145(4)**, 1574-1601.
12. Information Percolation with Equilibrium Search Dynamics, with Darrell Duffie and Gustavo Manso, **Econometrica**, 2009, **77**, 1513-1574.

Publications in Mathematical Finance

13. Convexity Bounds for BSDE Solutions, with Applications to Indifference Valuation, with Christoph Frei and Martin Schweizer, **Probability Theory and Related Fields**, 2011, **150**, 219-255.
14. Relative Extinction of Heterogeneous Agents, with Jaksa Cvitanic, **B. E. Journal of Theoretical Economics**, 2010, **10(1)**.

15. Market Consistent Pricing of Insurance Products, with E. Trubowitz and M. Wüthrich, **Astin Bulletin**, 2008, **38(2)**, 483-526.

16. Universal Bounds for Asset Prices in Heterogeneous Economies, **Finance and Stochastics**, 2008, **12(3)**, 411-422.

17. Long Run Forward Rates and Long Yields of Bonds and Options in Heterogeneous Equilibria, **Finance and Stochastics**, 2008, **12(2)**, 245-264.

18. The Structure of Optimal Consumption Streams in General Incomplete Markets, with E. Trubowitz, **Mathematics and Financial Economics,** 2007, **1(2)**, 129-161.

Publications in Pure Mathematics

19. On a Class of Multiparameter Perturbations of Positive-Definite Operators with Fixed Bounds on Their Spectrum, **Linear Algebra and Applications**, 1998, **274**, 239-257.

20. Some Complements to the Jensen and Chebyshev Inequalities and a Problem of W. Walter, **Proc. Amer. Math. Soc.**, 2001, **129(9)**, 2671-2678.

21. A Converse to the Jensen Inequality, Its Matrix Extensions and Inequalities for Minors and Eigenvalues, **Linear Algebra and Applications**, 2001, **322**, 19-41.

22. Operator Inequalities, Converse to the Jensen Inequality, **Mathematical Notes**, 2001, **69(4)**, 633-637.

23. On the Spectral Theory of Operator Measures, with M. Malamud, **Funct. Anal. and Appl.**, 2002, **36(2)**, 78-84.

24. Some Remarks on Completely Bounded Maps, **Methods of Functional Analysis and Topology**, 2002, **8(2)**, 69-87.

25. Analog of the Poincare Interlacing Theorem for Normal Matrices and the Gauss-Lukas theorem, **Funct. Anal. and Appl.**, 2003, **37(3)** 72-76.

26. Spectral Theory of Operator-Valued Measures in Hilbert Space, with M. Malamud, **St. Petersburg Math. Journal**, 2004, **15**, 323-373.

27. Inverse Spectral Problem for Normal Matrices and the Gauss-Lucas Theorem, **Trans. Amer. Math. Soc.**, 2005, **357**, 4043-4064.

Working Papers

28. Dominant Currency Debt, with Egemen Eren

29. Liquidity Provision in the Foreign Exchange Market, with Florent Gallien, Serge Kassibrakis, Nataliya Klimenko, and Alberto Teguia

30. Asset Pricing with Large Investors, with Alberto Teguia

31. An Intermediation-Based Model of Exchange Rates, with Andreas Schrimpf

32. Intermediation Markups and Monetary Policy Passthrough, with Andreas Schrimpf
33. Noisy Arrow-Debreu Equilibria.
34. A Dynamic Equilibrium Model of ETFs
35. Portfolio Selection with Options and Transaction Costs
36. Portfolio Delegation and Market Efficiency, with Evgeny Petrov

Talks at conferences and seminars[1]

- The Euro Area: Staying the Course through Uncertainties, Paris, March 2019 (scheduled)
- 27th CEPR European Summer Symposium on International Macroeconomics, Tarragona, Spain, May 2019 (scheduled)
- 16th Annual Conference in Financial Economics Research by Eagle Labs at IDC Herzliya, Israel (scheduled)
- NBER International Financial Markets Meeting, March 2019 (scheduled)
- Wharton Finance Seminar, Wharton, August 2018
- Stanford Institute for Theoretical Economics, Stanford, August 2018
- Cowles Center General Equilibrium Conference, Yale University, April 2018
- Adam Smith Asset Pricing Workshop, London Business School, March 2018
- 5th Chicago Booth International Macro-Finance Conference, December 2017
- 2nd Conference on OTC Markets, University of Santa Barbara, October 2017
- UCLA Finance Brown Bag, October 2017
- UC San Diego Economics Seminar, October 2017
- SED 2017, Edinburgh
- Paul Woolley Centre Conference, LSE, June 2017
- WFA 2016, Park City, June 2016
- Paul Woolley Centre Conference, LSE, June 2016
- INSEAD Finance Seminar, April 2016
- CEPR Workshop on Financial Economics, Imperial College, London, April 2016
- Bank of International Settlements, Basel, April 2016

[1] * indicates presentation by a co-author.

- NTU Finance Seminar, Singapore, March 2016
- NUS Finance Seminar, Singapore, March 2016
- Princeton University Micro Theory Seminar, February 2016
- American Economic Association Meeting, San Francisco, January 2016*
- European University Institute Macro-finance conference, Florence, November 2015
- Banque de France seminar, Paris, November 2015
- 7th European Banking Center Conference, Tilburg, October 2015*
- Finance Seminar at Duke University, October 2015
- CEPR Asset Pricing Meeting, Gerzensee, July 2015
- Finance Seminar at Caltech, October 2014
- CEPR Asset Pricing Meeting, Gerzensee, July 2014
- Finance Seminar at UCLA, March 2014
- WFA 2014, Monterey, June 2014
- Finance Seminar at MIT Sloan, March 2014
- Kellog Lunch Finance Seminar, Northwestern, March 2014
- Finance Theory Group Meeting, October 2013, Columbia Business School
- ECB workshop on market microstructure, September 2013
- Stanford Institute for Theoretical Economics*, Summer 2013 Workshop
- SAET 2013*, Paris, July 2013
- CEPR Asset Pricing Meeting, Gerzensee, July 2013
- Finance Seminar, University of Amsterdam, June 2013
- Four Nations Cup in Finance, London Business School, May 2013
- FMC^2 conference, Dublin, May 1, 2013
- Cowles Center General Equilibrium Conference, Yale University, April 2013
- American Economic Association*, January 2013, San Diego
- Finance Seminar, London Business School, December 2012
- Finance Seminar, Imperial College, December 2012
- Risk Center, ETH Zürich, October 2012
- Risk Management and Financial Markets, Toulouse, September 2012

- European Finance Association, Copenhagen, August 2012
- Summer Conference, Interdisciplinary Center, Herzliya, Israel, July 2012
- Western Finance Association, Las Vegas, June 2012
- Dublin City University, May 2012. I was invited to give a summer school based on my research.
- Finance Seminar, Vienna University of Economics and Business, April 2012
- University of Zürich, Zürich, April 2012
- Adam Smith Asset Pricing Conference, Oxford, March 2012 (discussion)
- European Winter Finance Summit, Davos, March 2012
- Real Estate Seminar, UC Berkeley, Berkeley, September 2011
- Finance Seminar, Copenhagen Business School, Copenhagen, September 2011
- CEPR Asset Pricing Meeting, Gerzensee, July 2011
- American Economic Association Meeting, Denver, Colorado, January 2011
- Tel Aviv Finance Conference, Tel Aviv, Israel, December 2010
- Finance Seminar, University of Konstanz, October 2010
- General Equilibrium Conference*, Yale University, April 2010
- World Congress of the Econometric Society, Shanghai, August 2010
- CEPR Asset Pricing Meeting, Gerzensee, July 2010.
- Large Portfolios, Concentration, and Granularity, Paris, April 2010
- Workshop on Foundations of Mathematical Finance, Toronto, January 2010
- Paris Finance International Meeting, Paris, December 2009
- European Meeting of the Econometric Society, Barcelona, August 2009
- CEPR Asset Pricing Meeting, Gerzensee, July 2009
- North-American Summer Meeting of the Econometric Society, Boston, June 2009
- Economics Seminar, Caltech, May 2009
- Finance Seminar, Arizona State University, April 2009.
- Mathematical Finance Seminar, The University of Texas at Austin, February 2009
- Finance Seminar, Ecole Polytechnique Fédérale de Lausanne, December 2008.
- International Conference of Price, Liquidity and Credit Risk, Konstanz, October 2008.