
Curriculum Vitae

Prof. Dr. Marc Oliver Rieger

Date of Birth: 22 September 1974	Citizenship: German
University of Trier	Marital Status: married, one child
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Current Academic Position

University of Trier, Department IV, since April 2010
Business Administration

Professor of Banking and Finance (W3), lectures on “Financial Economics”, “Financial Derivatives”, “Game and Decision Theory”, “Behavioral Finance”.

Previous Academic Positions

University of Zürich, ISB April 2007–March 2010
Assistant Professor (“Oberassistent”) in Financial Economics. Member of the NCCR Finrisk and of the University Priority Project “Finance and Financial Markets”. Lectures on “Advanced Microeconomics”, “Financial Economics” and “Banking: Structured Products”.

University of Bielefeld Oct. 2008–March 2009 and June 2009
Visiting Professor (“Lehrstuhlvertretung”) in Mathematical Economics (former professorship of Prof. Reinhard Selten). Lectures within the *QEM-Program (international master degree)* on “Finance”, “Behavioral Decision Theory and Finance” and “Dynamic Financial Markets”.

University of Zürich and ETH Zürich Sep. 2004–March 2007
Postdoctoral Associate and lecturer for “Numerics I” and “Advanced Microeconomics I+II” (game theory and decision theory) at the University of Zürich. Research visits at the **University of Bonn**, the **Université de Savoie** and the **University of Bath**.

Scuola Normale Superiore, Pisa Sep. 2003–Aug. 2004
Postdoctoral Researcher at the Scuola Normale Superiore. Research visit at the **Instituto Superior Técnico, Lisbon**.

Carnegie Mellon University, Pittsburgh (USA) Sep. 2001–Aug. 2003
Research Scholar at the *Center for Nonlinear Analysis*. Research visits at the **University of Bonn** and at the **California Institute of Technology**.

**Max-Planck-Institute for Mathematics
in the Sciences, Leipzig**

Oct. 1998–Aug. 2001

Research Assistant, PhD thesis on “*Nonconvex Dynamical Problems*”.
Advisor: *Prof. Stefan Müller, Director of the MPI.*

University of Konstanz

Oct. 1993–Sep. 1998

Student of Mathematics and Physics, diploma thesis on “*Asymptotic Behaviour of Radially Symmetric Solutions to Thermoelasticity Equations*”.
Advisor: *Prof. Reinhard Racke.*

Main Research Interests

My main research interests are in the area of finance, in particular behavioral finance and financial derivatives. I often combine theoretical, empirical and (sometimes) experimental methods. My current research is mainly focused on:

- **Financial derivatives and structured products** (e.g. investor preferences on structured financial products; barrier options).
- **Behavioral finance** (e.g. application of behavioral finance to investment decisions or dividend policies; behavioral game theory).
- **Financial economics** (e.g. volatility asymmetry on international financial markets and potential regulatory consequences; an international survey comparing investor preferences in 45 countries).
- **Behavioral decision theory** (e.g. further development of prospect theory).

Honors and Awards

Jury president of the Swiss Derivative Award 2011 in Zurich.

Special research grant of the University of Trier (2011).

Grant of the Scuola Normale Superiore for participation in the trimester on “*Calculus of Variations and Partial Differential Equations*” (2006).

Postdoctoral Scholarship of the Scuola Normale Superiore (2003–2004).

Member of the *graduate school* of the University of Leipzig (2000–2001).

Scholarship of the *Studienstiftung des deutschen Volkes* (1993–1998).

Special prize at the final round of the German “*Science Fair*“ competition („*Jugend forscht*“).

Professional and Administrative Service

- Various committees at the University of Trier.
- Referee for various journals in economics, finance and mathematics (e.g. *American Economic Review*, *Journal of Banking and Finance*, *Management Science*, *Journal of Economic Behavior and Organization*, *Journal of Economic Dynamics and Control*, *Theory and Decision*, *Nonlinearity*, *SIAM Journal of Appl. Math.*, *Journal of Mathematical Economics*) and reviewer of *Mathematical Reviews* of the *American Mathematical Society*.
- Organizer of the public presentation of the ISB at the “Parcours des Wissens” for the 175th anniversary of the University of Zürich (March 2008).
- Organizer and member of the Scientific Committee for the international conference “ANA – *Advances in Nonlinear Analysis*” at the Carnegie Mellon University. For details see: <http://www.math.cmu.edu/~ana/>. (May/June 2003).
- Member of various committees at the University of Konstanz and at the University of Trier (undergrad committees, examinations committees, appointment boards etc.).

Selected Talks

Invited talks at seminars and colloquia:

University of Mainz; NTNU Trondheim; University of Dortmund; University of Kiel; University of Göttingen; University of Konstanz; University of Trier; University of Luxembourg; University of Ulm; Doshisha University (Kyoto); University of Münster; University of Bielefeld, University of Fribourg; Brunel University (London); Université de Savoie; University of Bonn; ETH Zürich; University of Sussex; University of Bath; Instituto Superior Técnico, Lisbon; California Institute of Technology; University of Regensburg; University of Stuttgart; Perdue University, Indiana; University of Illinois etc.

Conference talks (refereed papers) since 2008:

CARISMA conference “The interface of behavioral and quantitative finance”, London, 2010.

EFA (European Finance Association) conference, Bergen, 2009.

Annual conference of the “Verein für Socialpolitik”, Magdeburg, 2009.

12th Conference of the Swiss Finance Association (SGF), Zürich, 2009.

8th Kölner Finanzmarktkolloquium, Köln, 2009.

11th Karlsruhe Finance Symposium, Karlsruhe, 2008.

15th Meeting of the German Finance Association (DGF), Münster, 2008.

European Mathematics Conference, Amsterdam, 2008 (invited talk).

Conference on mathematical economics und finance, Manchester, 2008.

11th Conference of the Swiss Finance Association (SGF), Zürich, 2008.

Asian Finance Association Conference, Yokohama, 2008.

International Chinese Finance Conference, Dalian, 2008.

Selected Publications

Publications in peer-reviewed journals in economics and finance:

- [1] “Explaining asymmetry volatility around the world” (with Tonn Talpsepp), forthcoming in: *Journal of Empirical Finance*.
- [2] “To risk averse for prospect theory?” (with Thuy Bui), forthcoming in : *Modern Economy*.
- [3] “Volatility asymmetry, news and private investors“ (with Michal Dzielinski and Tonn Talpsepp), forthcoming in: *News Analytics in Finance Handbook*, Wiley & Sons.
- [4] “Financial Market Equilibria with Cumulative Prospect Theory” (with Enrico De Giorgi and Thorsten Hens), *Journal of Mathematical Economics*, 46(5), pp. 633–651, 2010.
- [5] “Probability misestimation and preferences in financial investment decisions”, forthcoming in: *Journal of Behavioral Finance*.
- [6] “Co-monotonicity of optimal investments und the design of structural financial products”, *Finance and Stochastics*, 15(1), pp. 27–55, 2011.
- [7] “SP/A and CPT: a reconciliation of two behavioral decision theories”, *Economics Letters*, 108(3), pp. 327–329, 2010.
- [8] “What is behind the Priority Heuristic? – A mathematical analysis” (with Mei Wang), *Psychological Review*, 2008.
- [9] “Prospect Theory for continuous distributions” (with Mei Wang), *Journal of Risk and Uncertainty*, vol. 36, no. 1, pp. 83–102, 2008.
- [10] “Cumulative Prospect Theory and the St. Petersburg Paradox” (with Mei Wang), *Economic Theory*, 28 (2006), pp. 665-679.

Selected working papers:

- [11] “The dark side of the moon – structured products from the investor’s point of view” (with Thorsten Hens), working paper NCCR Finrisk, 459 (2008).
- [12] “Evolutionary Stability of Prospect Theory Preferences”, working paper NCCR Finrisk (2009).
- [13] “An International Survey on Time Discounting” (with Thorsten Hens and Mei Wang), working paper NCCR Finrisk (2009).
- [14] “Wie beeinflusst Basel II die Kreditkonditionen von öffentlich-rechtlichen Körperschaften? Empirische Befunde aus der Schweiz” (with Pascal Vetterli and Stephan Berger), ISB applied working paper (2008).
- [15] “How Likely is it to Hit a Barrier? Theoretical and Empirical Estimates“ (with Lujing Su), working paper (2009).
- [16] “Equilibria in games with prospect theory preferences“ (with Lars Metzger), working paper (2009).

Books:

- [17] "Financial Economics – a concise introduction to classical and behavioral finance", approx. 400 pages, (with Thorsten Hens), Springer Verlag (2010).
- [18] "Optionen, Derivate und strukturierte Produkte – ein Praxisbuch", approx. 350 pages, NZZ-Verlag, Zürich and Verlag Schäffer-Poeschel (2009).

Publications in applied mathematics (previous research area):

- [1] "Gradient flows in asymmetric metric spaces" with Chenchiah, Isaac Vikram; Zimmer, Johannes; in: *Nonlinear Anal.* 71 (2009), no. 11, 5820--5834.
- [2] "Young measure flow as a model for damage" with Zimmer, Johannes; in: *Z. Angew. Math. Phys.* 60 (2009), no. 1, 1--32.
- [3] "Higher dimensional problems with volume constraints – existence and Gamma-convergence"; in: *Interfaces Free Bound.* 10 (2008), no. 2, 155--172.
- [4] "Local minimizers of functionals with multiple volume constraints" with Oudet, Édouard; in: *ESAIM Control Optim. Calc. Var.* 14 (2008), no. 4, 780--794.
- [5] "Parameter dependence of multiscale systems and nanostructures on crystals" with Zirnstein, Heinrich-Gregor; in: *Math. Mech. Solids* 12 (2007), no. 5, 513--525.
- [6] "Variational problems for functionals involving the value distribution. Variational problems in materials science", 25--41, *Progr. Nonlinear Differential Equations Appl.*, 68, Birkhäuser, Basel, 2006.
- [7] "Global existence for nonconvex thermoelasticity" with Zimmer, Johannes; in: *Adv. Math. Sci. Appl.* 15 (2005), no. 2, 559--569.
- [8] "Parabolic systems with nowhere smooth solutions" with Müller, Stefan; Šverák, Vladimír; in: *Arch. Ration. Mech. Anal.* 177 (2005), no. 1, 1--20.
- [9] "A model for hysteresis in mechanics using local minimizers of Young measures. Elliptic and parabolic problems", 403--414, *Progr. Nonlinear Differential Equations Appl.*, 63, Birkhäuser, Basel, 2005.
- [10] "On the Gamma-limit of the Mumford-Shah functional" with Tilli, Paolo; in: *Calc. Var. Partial Differential Equations* 23 (2005), no. 4, 373--390.
- [11] "A relaxed model for step-terraces on crystalline surfaces" with Kurzke, Matthias; in: *J. Convex Anal.* 11 (2004), no. 1, 59--67.
- [12] "Abstract variational problems with volume constraints"; in: *ESAIM Control Optim. Calc. Var.* 10 (2004), no. 1, 84--98 (electronic).

- [13] "Young-measure approximations for elastodynamics with non-monotone stress-strain relations" with Carstensen, Carsten; in: M2AN Math. Model. Numer. Anal. 38 (2004), no. 3, 397--418.
- [14] "Exponential stability and global existence in thermoelasticity with radial symmetry", in: Quart. Appl. Math. 62 (2004), no. 1, 1--25.
- [15] "Young measure solutions for nonconvex elastodynamics"; in: SIAM J. Math. Anal. 34 (2003), no. 6, 1380--1398 (electronic).
- [16] "A volume constrained variational problem with lower-order terms", with Morini, Massimiliano; in: Appl. Math. Optim. 48 (2003), no. 1, 21--38.
- [17] "Time dependent Young measure solutions for an elasticity equation with diffusion"; in: International Conference on Differential Equations, Vol. 1, 2 (Berlin, 1999), 457--459, World Sci. Publ., River Edge, NJ, 2000.

Media presence and publicity (selection)

Several *newspaper articles and interviews*, e.g. in:

- FAZ (Frankfurter Allgemeiner Zeitung),
- Süddeutsche Zeitung,
- NZZ (Neue Zürcher Zeitung),
- Tagesanzeiger,
- Bilanz (Swiss investment magazine),
- Cash Daily,
- Payoff Magazine etc.

Several *radio interviews* (Swiss radio DRS).