Martin Šmíd

Personal Details

Date of Birth: 2 March 1970
Nationality Czech
Status: married, 3 children

Education

- 1998 – 2004 Charles University, Prague
  PhD in Econometrics and Operations Research
  Dissertation: On Approximation of Stochastic Programming Problems

- 1988 – 1997 Charles University, Prague
  MSc in Econometrics

Research interests

- decision-making under uncertainty
- stochastic models of limit order markets
- factor models of credit risk
- asset and liability management
- stochastic optimization

Employment History

- 2002 – now: Institute of Information Theory and Automation of the Czech Academy of Sciences
  - research fellow, Department of Econometrics

- 2006 – now: Charles University, Prague
  - teaching assistant at the Faculty of Social Sciences (2006- 8)
  - external lecturer at the Faculty of Mathematics and Physics (2015-now)
  - PhD thesis supervisor (two graduates so far)

- 2001 – 2005: University of Economics, Prague, Jindřichův Hradec
  - teaching assistant (Optimization methods, Mathematical economics)
  - teacher (Statistics)

- 1992 – 1998: Notia, Inc, Prague
  - programmer-analyst (System2000 - business information system)

Recent Scientific Activities

- microstructure of financial markets (Šmíd and Kopa 2017, Šmíd 2016, Šmíd 2012b)
- multistage decision models of emission covering (Zapletal and Šmíd 2016)
- dynamic credit risk models (Gapko and Šmíd 2012a, 2016)

Funding

- 2006 – 2008: Mathematical modelling of the microstructure of financial markets with the non-synchronous trading
    - principal researcher
    - assessed as excellent by Czech Science Foundation
- 2010 – 2012: Rational decision making at markets with asynchronous trading: theory and empirical evidence
    - principal researcher
    - assessed as excellent by Czech Science Foundation
- 2013 – 2015: The research team for the modelling of economic and financial processes at VSB-TU Ostrava (funded by EU)
    - head of the project partner's team
- 2015 – 2017: Dynamic modelling of mortgage portfolio risk
    - principal researcher
- 2016 – 2018: Dynamic decision-making of a steel producer under emission control
    - principal researcher
- Eight other projects
    - member of a research team

Membership

- 2008 – 2012: The Grant Agency of the AS CR, Prague (currently phased-out)
    - vice-chair of the Council for Humanities and Social Sciences
- 2012 – now: Faculty of Mathematics and Physics, Charles University
    - member of the Doctoral Council of Financial and Insurance Mathematics Programme
- 2015 – now: Kybernetika
    - associated editor
- 2017 – now: Czech Science Foundation
    - member of the Panel for Economic Sciences, Macroeconomics, Microeconomics, Econometrics, Quantitative Methods in Economics

Selected Publications

ŠMÍD Martin, and KOPA Miloš. Dynamic Model of Market with Uninformed Market Maker. *Kybernetika,* 53, 5 (2017)

GAPKO Petr, and ŠMÍD Martin. Multi-Period Structural Model of Mortgage Portfolio with Cointegrated Factors. *Czech Journal of Economics and Finance,* 66, 6 (2016)

ŠMÍD Martin. Estimation of zero intelligence models by L1 Data. *Quantitative Finance,* 16, 9 (2016)

ZAPLETAL Framtišek, and ŠMÍD Martin. Mean-risk optimal decision of a steel company under emission control. *Central European Journal of Operations Research,* 24, 2 (2016)

GAPKO Petr, and ŠMÍD Martin. Dynamic Multi-Factor Credit Risk Model with Fat-Tailed Factors , Finance a úvěr-Czech Journal of Economics and Finance, 62, 2 (2012)

ŠMÍD Martin. Probabilistic properties of the continuous double auction. *Kybernetika,* 48, 1 (2012b)

ŠMÍD Martin. The expected loss in the discretization of multistage stochastic programming problems - estimation and convergence rate. *Annals of Operations Research*, 165, 1 (2009)