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- PERSONAL DATA ◇ *Citizenship* Swiss, Hungarian
- RESEARCH INTERESTS Applied Microeconomic Theory, Market Microstructure and Intermediation, Mechanism Design, Dynamic Random Matching, Computational Economics and Finance
- CURRENT POSITION Post-Doctoral Research Fellow, Kellogg School of Management, Managerial Economics and Decision Sciences, Northwestern University
- EDUCATION ◇ *2003 - 2008* PhD in Economics at the University of Bern (summa cum laude), Advisor: Prof. Winand Emons, Co-advisor: Prof. Armin Schmutzler
- ◇ *2002 - 2003* MSc Economics, London School of Economics
- ◇ *1997 - 2002* lic. rer. pol. (equivalent to Masters), University of Bern, Major: Economics, Minor: Computer Sciences
- PUBLICATIONS ◇ “Applying Markowitz’s Critical Line Algorithm”, with Daniel Niedermayer, forthcoming, “Handbook of Portfolio Construction: Contemporary Applications of Markowitz Techniques”, edited by John Guerard, London: Springer
- WORKING PAPERS ◇ “Fee Setting Intermediaries: On Real Estate Agents, Stock Brokers, and Auction Houses”, September 2008 (with Simon Loertscher, University of Melbourne) (**Job Market Paper**)
- ◇ “Does a Platform Monopolist Want Competition?”, University of Bern Discussion Paper 06-04, 2006 (Revise & Resubmit from the *Journal of Economics & Management Strategy*)
- ◇ “Informational Hold-Up, Disclosure Policy, and Career Concerns on the Example of Open Source Software Development”, NET Institute Working Paper, NYU, Stern School of Business, September 2008 (with Marc Blatter, University of Bern), under review
- ◇ “On Platforms, Incomplete Contracts, and Open Source Software”, University of Bern Discussion Paper 07-07, 2007
- WORK IN PROGRESS ◇ Reputation and Ownership Structure in Markets with Technological Change (with Maija Halonen-Akatwijuka, University of Bristol)
- ◇ Who Should Set the Price? (with Péter Eső, MIT)
- ◇ Advertising and Elections (with Marina Niessner, University of Chicago)
- GRANTS AND AWARDS ◇ NET Institute Summer Research Grant 2008 (www.netinst.org), “Informational Hold-Up and Open Source Software Development”
- ◇ Swiss National Science Foundation Grant PBBE1-121057 for Young Researchers

- CONFERENCE AND SEMINAR PRESENTATIONS
- 2008
- ◇ *Seminars:* Brown Bag Seminar at University of Bern, Seminar at University of Bristol, Theory Bag Lunch Seminar at Northwestern University, Applied Micro Theory Workshop at University of Pennsylvania, University of Michigan Theory Lunch (November 25), Seminar at the University of Mannheim (March 10, 2009)
 - ◇ *Conferences:* Fall Midwest Economic Theory Meetings in Columbus (OH), ZEW Conference on the Economics of Information and Communication Technologies in Mannheim, Society for Economic Design Conference in Ann Arbor (MI), International Industrial Organization Conference in Washington DC, Annual Meeting of the Swiss Society of Economics and Statistics in Lausanne
- 2007
- ◇ *Seminars:* Brown Bag Seminar at University of Bern, Economics Lunch at University of Basel, Microeconomic Theory Seminar at University of Zurich
 - ◇ *Conferences:* European Association for Research in Industrial Economics in Valencia, Annual Congress of the European Economic Association/European Meeting of the Econometric Society in Budapest, Society for the Advancement of Economic Theory Conference in Kos (Greece), Workshop “The diffusion of F/LOSS and the Organisation of the Software Industry”, Spring Meeting of Young Economists’ in Hamburg, International Industrial Organization Conference in Savannah (GA)
- 2006
- ◇ *Seminars:* Brown Bag Seminar at University of Bern
 - ◇ *Conferences:* Young Swiss Economists’ Meeting of the Swiss Society of Economics and Statistics in Bern, European Association for Research in Industrial Economics in Amsterdam, Swiss IO Day in Bern, International Industrial Organization Conference in Boston, Annual Meeting of the Swiss Society of Economics and Statistics in Lugano
- TEACHING
- ◇ Theory of Informational Asymmetries, 2005 and 2007 (TA)
 - ◇ Doing Economics with the Computer, 2004-2007 (Lecturer)
 - ◇ Welfare Economics, 2006 (TA)
 - ◇ Game Theory, 2005 (TA)
 - ◇ Intermediate Microeconomics, 2004 (TA)
 - ◇ Theory of the Firm, 2003 (TA)
 - ◇ Principles Microeconomics, 2003 (TA)
- ADVANCED DOCTORAL COURSES
- ◇ 2007 Asset Pricing under Asymmetric Information, Markus K. Brunnermeier, Study Center Gerzensee
 - ◇ 2006 Advanced Market Design, Paul Milgrom, Study Center Gerzensee
 - ◇ 2005 Political Economics and Economic Development, Daron Acemoglu, Study Center Gerzensee
 - ◇ 2005 Cooperative Game Theory, Eric Maskin, Study Center Gerzensee
- REFEREEING
- ◇ B.E. Journal of Theoretical Economics
 - ◇ Swiss Journal of Economics and Statistics
- OTHER PROFESSIONAL ACTIVITIES
- ◇ Co-organizer of the conference “Second Swiss IO Day” (May 11, 2007, with Winand Emons, Armin Schmutzler, and Lucy White)
<http://www.vwi.unibe.ch/swissioday>

- WORK EXPERIENCE
- ◇ 2003 - 2008 Research and Teaching Assistant, Department of Economics, Economic Theory, University of Bern
 - ◇ 2000 - 2002 Junior Assistant, Department of Economics, Economic Theory, University of Bern
 - ◇ 1999 - 2002 Software Developer, SHS Engineering AG, Bern (part-time and summer job)
 - ◇ 1998 - 2001 Software Developer, Computer Sciences Department, University of Bern (part-time and summer job)
- SOFTWARE DEVELOPMENT SKILLS
- ◇ Matlab (Matlab Code, MEX-extension file development with C and Fortran), Stata, Eviews, Maple, Mathematica
 - ◇ Assembler (Intel x86 and Motorola 68000), awk, Basic (GFA Basic, Visual Basic, VB for Applications, ASP VBScript), C/C++, ELisp, EViews, Fortran, HTML, Java, JavaScript, JSP, Perl, PHP, PL/SQL, Python, Shell Script
 - ◇ MS-DOS, MS-Windows, Unix (AIX, Linux, Solaris)
- REFERENCES
- ◇ Prof. Winand Emons
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 - ◇ Prof. Péter Eső
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 - ◇ Prof. Mark Satterthwaite
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ABSTRACTS OF
PAPERS

Papers available at <http://andras.niedermayer.ch/index.php?page=research>

- ◇ *Fee Setting Intermediaries: On Real Estate Agents, Stock Brokers, and Auction Houses*, with Simon Loertscher, **Job Market Paper**

Mechanisms where intermediaries charge a commission fee and have the sellers set the price are widely used in practice e.g. by real estate agents, stock brokers, art galleries, or auction houses. We model competition between intermediaries in a dynamic random matching model, where in every period a buyer, a seller, and an intermediary are randomly matched. In any period, every intermediary has a temporary monopoly and designs an exchange mechanism that maximizes his own expected profits. Traders' valuations for the indivisible good depend on their option value of future trade. The following results obtain. First, we show that the intermediary can achieve the highest possible profit with a fee setting mechanism. Second, we characterize when these fees are linear. Third, fee setting is an equilibrium outcome in a dynamic market. Fourth, when the rematching probability increases or, equivalently, the period length decreases, the equilibrium fees become smaller. Fifth, we show that our model can explain several of the stylized facts observed in real estate brokerage, such as the 6% fee, the relation between listing price and time on market, inefficient free entry, higher prices for houses owned by brokers, and home owners who bought during a boom asking higher prices. We also provide various extensions.

- ◇ *Applying Markowitz's Critical Line Algorithm*, with Daniel Niedermayer, forthcoming in "Handbook of Portfolio Construction: Contemporary Applications of Markowitz Techniques" (London: Springer, contributions by Paul Samuelson, Robert Korajczyk, Eli Schwartz, John Mulvey, and others)

We provide a Matlab quadratic optimization tool based on Markowitz's critical line algorithm that significantly outperforms standard software packages and a recently developed operations research algorithm. As an illustration: For a 2000 asset universe our method needs less than a second to compute the whole frontier whereas the quickest competitor needs several hours. This paper can be considered as a didactic alternative to the critical line algorithm such as presented by Markowitz and treats all steps required by the algorithm explicitly. Finally, we present a benchmark of different optimization algorithms' performance.

- ◇ *Informational Hold-Up, Disclosure Policy, and Career Concerns on the Example of Open Source Software Development*, with Marc Blatter, awarded a NET Institute Summer Research Grant 2008 (www.netinst.org), under review

We consider software developers who can either work on an open source project or on a closed source project. The former provides a publicly available signal about their talent, whereas the latter provides a signal only observed by their employer. We show that a talented employee may initially prefer a less paying job as an open source developer to commercial closed source projects, because a publicly available signal gives him a better bargaining position when renegotiating wages with his employer after the signal has been revealed. Also, we derive conditions under which two effects suggested by standard intuition are reversed: a pooling equilibrium (with both talented and untalented workers doing closed source) is less likely if differences in talent are large; a highly visible open source job leads to more effort in a career concerns setup. The former effect is because a higher productivity of talented workers raises not only the value but also the cost of signaling; the latter stems from more effort and the choice of a high visibility job being substitutes for the purpose of signaling. Results naturally apply to other industries with high and low visibility jobs, e.g. academic rather than commercial research, consulting rather than management.

- ◇ *Does a Platform Monopolist Want Competition?*, revise and resubmit from the Journal of Economics and Management Strategy

We consider a software vendor first selling a monopoly platform and then an application running on this platform. He may face competition by an entrant in the applications market. The platform monopolist can benefit from competition for three reasons. First, his profits from the platform increase. Second, competition serves as a credible commitment to lower prices for applications. Third, higher expected product diversity may lead to higher demand for his application. Results carry over to non-software platforms and, partially, to upstream and downstream firms. The model also explains why Microsoft Office is priced significantly higher than Microsoft's operating system.

- ◇ *On Platforms, Incomplete Contracts, and Open Source Software*

We consider a firm A initially owning a software platform (e.g. operating system) and an application for this platform. The specific knowledge of another firm B is needed to make the platform successful by creating a further application. When B's application is completed, A has incentives to expropriate the rents. Netscape claimed e.g. that this was the case with its browser running on MS Windows. We will argue that open sourcing or standardizing the platform is a warranty for B against expropriation of rents. The different pieces of software are considered as assets in the sense of the property rights literature (see Hart and Moore (Journal of Political Economy, 1990)). Two cases of joint ownership are considered beyond the standard cases of integration and non-integration: platform standardization (both parties can veto changes) and open source (no veto rights). In line with the literature, the more important a party's specific investments the more rights it should have. In contrast to Hart and Moore, however, joint ownership can be optimal in our setting. Open source is optimal if investments in the applications are more important than in the platform. The results are driven by the fact that in our model firms invest in physical (and not in human) capital and that there is non-rivalry in consumption for software.