

MATTHIAS WEBER

HOME ADDRESS

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BUSINESS ADDRESS

Center for Research in
Experimental Economics and
Political Decision Making
(CREED), University of
Amsterdam, Roeterstraat 11,
1018WB Amsterdam, The
Netherlands

EDUCATION

University of Amsterdam, Ph.D. in Economics (supervision by Arthur Schram). Expected
Completion: June 2015.

Tinbergen Institute, MPhil in Economics (specialization in behavioral economics), 2009-2011.

University of Freiburg, Diplom in mathematics (comparable to a combined BSc and MSc
program; specialization in mathematical and applied statistics), 2003-2009.

REFERENCES

Arthur Schram

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University of California,
Irvine
Department of Economics
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Irvine, CA 92697-5100, USA
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RESEARCH AND TEACHING FIELDS

Behavioral & Experimental Economics, Public Economics, Political Economy & Political Science,
Macroeconomics, Applied Econometrics, Finance.

TEACHING EXPERIENCE

2012-14 International Money. Teaching assistant for Prof. Franc Klaassen. BSc Economics,
University of Amsterdam.
2010 Macroeconomics I. Teaching assistant for Prof. Wouter den Haan. MPhil Economics,
Tinbergen Institute.
2007 Probability Theory. Teaching assistant for Prof. Ernst Eberlein. BSc/MSc
Mathematics, University of Freiburg.
2006 Introductory Stochastics. Teaching assistant for Prof. Ernst Eberlein. BSc
Mathematics, University of Freiburg.
2005 Analysis II. Teaching assistant for Prof. Michael Růžička. BSc Mathematics,
University of Freiburg.

2004 Analysis I. Teaching assistant for Prof. Michael Růžička. BSc Mathematics, University of Freiburg.

GRANTS AND SCHOLARSHIPS

2012-15 Research Talent Grant of The Netherlands' Organisation for Scientific Research, joint with Arthur Schram (ca. € 170 000).
2011-14 Funding for laboratory experiments from the Research Priority Area Behavioral Economics of the University of Amsterdam (ca. € 20 000).
2010-11 Tinbergen Institute Scholarship (ca. € 12 000, based on academic merit).
2009-10 Tinbergen Institute Scholarship (ca. € 12 000, based on academic merit).

RELEVANT PROFESSIONAL EXPERIENCE

2011-12 Testing of the 2012 Dutch Multiband Frequency Auction software for the Dutch Ministry of Economic Affairs, Agriculture and Innovation.
2005-06 Assistantship at the Deutsche Gesellschaft für Technische Zusammenarbeit (the main German organization for Development Cooperation), mainly in the field of public relations (in Dakar and Ziguinchor, Senegal).

ORGANIZATIONAL AND SOCIAL ACTIVITIES

2011-14 Organization of the internal seminar series of the Amsterdam School of Economics.
2010-12 Member of the Educational Board of the Tinbergen Institute.
2010-11 Member of the Student Council of the Tinbergen Institute.
2008-09 Member of the NGO for development cooperation Aktion 5% für die Dritte Welt e.V.
2003-09 Member (actor, co-director, and co-organizer) of the student drama group Theaterprojekt Hall.

SEMINARS AND PRESENTATIONS AT CONFERENCES AND WORKSHOPS

Rady School Seminar (UCSD) San Diego 2014, ESA NA meetings Fort Lauderdale 2014, MBEES Maastricht 2014, EPCS Meeting Cambridge 2014, Voting Experiments Workshop Montreal 2014, SEET Meeting Sesimbra 2014, Workshop Causes and Consequences of Happiness Rotterdam 2013, Behavioral Economics PhD Course Bergen 2013, ESA World Meetings Zurich 2013, Summer Institute on Bounded Rationality Berlin 2013, CCC Meeting Amsterdam 2013, MBEES Maastricht 2013, CCC Meeting Norwich 2012, ESA World Meetings New York 2012.

PARTICIPATION IN SUMMER SCHOOLS AND OTHER GRADUATE COURSES

Behavioral Economics by David Laibson at The Choice Lab (NHH) Bergen 2013, *Summer Institute on Bounded Rationality* at Max Planck Institute for Human Development Berlin 2013, *Experimental Macroeconomics* at University Pompeu Fabra Barcelona 2013, *Behavioral Economics* by Uri Gneezy at University of Amsterdam 2012, *Field and Lab Experiments in Economics* by John List at The Choice Lab (NHH) Bergen 2012.

RESEARCH VISITS

University of California, San Diego (October-November 2014), Universitat Autònoma de Barcelona (January 2013, June 2014).

THESIS SUPERVISION

Marieke van der Wilt (MSc 2014), Vania Esady (BSc 2014), Rebelle Smit (BSc 2014), Leonard Treuren (BSc 2014), Paulien Janse (BSc 2014), Pieter Hijink (BSc 2013), Birk Jonker (BSc 2013), Rob Wessels (BSc 2012), Levien de Kraa (BSc 2012).

LANGUAGES

German (native), English (very high level), Dutch (high level), French (high level), Italian (basic), Spanish (basic).

IT SKILLS

R, Matlab, C, PHP, MySQL, HTML, Javascript, z-Tree, LaTeX.

RESEARCH PAPERS, UNPUBLISHED (pdf-files available at weber-matthias.eu)

Choosing Voting Systems behind the Veil of Ignorance: A Two-Tier Voting Experiment (Job Market Paper)

There are many situations in which different groups make collective decisions by committee voting, with each group represented by a single person. A natural question is what voting system such a committee should use. Concepts based on voting power provide guidelines for this choice. The two most prominent concepts require the Banzhaf power index to be proportional to the square root of group size or the Shapley-Shubik power index to be proportional to group size. Instead of studying the choice of voting systems based on such theoretical concepts, in this paper, I ask which systems individuals actually prefer. To answer this question, I design a laboratory experiment in which participants choose voting systems. I find that people behind the veil of ignorance prefer voting systems following the rule of proportional Shapley-Shubik power; in front of the veil subjects prefer voting systems benefiting their own group. Participants' choices can only partially be explained by utility maximization or other outcome based concepts.

The Non-Equivalence of Labor Market Taxes: A Real-Effort Experiment (with Arthur Schram)

Under full rationality, a labor market tax levied on employers and a corresponding income tax levied on employees are equivalent. With boundedly rational agents, this equivalence is no longer obvious and the different reactions to these two taxes become important for policy making, political economics, and optimal taxation theory. In a real effort laboratory experiment, we study the differential effects of the two taxes on preferences concerning the size of the public sector, subjective well-being, labor supply, and on-the-job performance. Our findings suggest that employer-side taxes induce preferences for a larger public sector. In addition, subjective well-being is higher when the taxes are levied on employers while labor supply is lower, at least at the extensive margin. We discuss three mechanisms that may underlie these results.

Regularized Regression Incorporating Network Information: Simultaneous Estimation of Covariate Coefficients and Connection Signs (with Martin Schumacher and Harald Binder)

We develop an algorithm that incorporates network information into regression settings. It simultaneously estimates the covariate coefficients and the signs of the network connections (i.e. whether the connections are of an activating or of a repressing type). For the coefficient estimation steps an additional penalty is set on top of the lasso penalty, similarly to Li and Li (2008). We develop a fast implementation for the new method based on coordinate descent.

Furthermore, we show how the new methods can be applied to time-to-event data. The new method yields good results in simulation studies concerning sensitivity and specificity of non-zero covariate coefficients, estimation of network connection signs, and prediction performance. We also apply the new method to two microarray time-to-event data sets from patients with ovarian cancer and diffuse large B-cell lymphoma. The new method performs very well in both cases. The main application of this new method is of biomedical nature, but it may also be useful in other fields where network data is available.

Solving the Inverse Power Problem in Two-Tier Voting Settings

There are many situations in which different groups make collective decisions by committee voting, where each group is represented by a single person. Theoretical concepts suggest how the voting systems in such committees should be designed, but these abstract rules can usually not be implemented perfectly. To find voting systems that approximate these rules the so called inverse power problem needs to be solved. I introduce a new method to address this problem in two-tier voting settings using the coefficient of variation. This method can easily be applied to a wide variety of settings and rules. After deriving the new method, I illustrate why it is to be preferred over more traditional methods.

RESEARCH PAPERS, PUBLISHED

Mostly Sunny: A Forecast of Tomorrow's Power Index Research (with Sascha Kurz, Nicola Maaser, and Stefan Napel; forthcoming in *Homo Oeconomicus*)

Power index research has been a very active field over the past few decades. Will this continue or have all important questions been solved? We argue that there are still many opportunities to conduct useful research with and on power indices. Positive and normative questions remain, calling for theoretical and empirical attention. Technical and technological improvements are likely to boost applicability.

RESEARCH IN PROGRESS

Macroeconomic Behavior and Monetary Policy under Behavioral Expectations: Theory and Experiment (with Cars Hommes and Domenico Massaro; experimental sessions completed, manuscript in preparation)

Expectations play a crucial role in modern macroeconomic models. We replace the common assumption of rational expectations in a New Keynesian framework by the assumption that expectations are formed according to a heuristics switching model that has performed well in earlier work. We show how the economy behaves under these assumptions with a special focus on inflation volatility. Then we derive implications for monetary policy. We compare the results of the behavioral model to the results arising from full rationality and conduct a learning to forecast experiment to test the opposing theoretical predictions in the laboratory.

Bond Markets and Credit Default Swaps: Experimental Evidence (with John Duffy and Arthur Schram; experimental sessions completed, manuscript in preparation)

Though bond market interest rates and credit default swaps played an important role in the recent financial crisis, little is known about how they interact and affect the probability of bankruptcy. We experimentally investigate how the regulation of credit default swaps influences price

formation in a bond market and the likelihood of defaults. Our experimental bond market is different from previous experimental asset markets in that the price of the bond feeds back into the default probability of the issuer as is the case in actual bond markets. In this environment, we investigate the working of credit default swaps when (i) no credit default swaps are available, (ii) when they are available exclusively as insurance, and (iii) when they can be freely traded for insurance motives and speculative purposes. We investigate this with increasing and decreasing fundamental prices in the bond market.