Alexander Guggenberger

Contact Information

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Current Positions

Since 9/2021	PhD Candidate	University of Salzburg
	Topic: "Empirical studies on the (strategic) value of information"	
Since 05/2021	Research Assistant	University of Salzburg

Fields

Behavioral and Experimental Economics

Previous Academic Positions

02/2020 - 04/2021	Research Assistant	University of Vienna
09/2019 - 02/2020	Tutor *("Quantification and Statistics")*	University of Vienna
07/2019 - 09/2019	Research visit	MPI for Demographic Research

Education

10/2024 -12/2024	Visiting PhD Student	University of Rotterdam
10/2018 - 03/2020	MSc in Economics	University of Vienna
	(with distinction & below regular duration)	
10/2015 - 09/2018	BSc in Economics	University of Vienna

Grants and Presentations

05/2025	Presentation at SCEUS Young Scholars' Workshop
11/2024	Presentation at the PLUS Econ Workshop in Salzburg
09/2023	Presentation at the Austrian Economic Association's (NOeG) annual conference
12/2022	Graf Hardegg Foundation Research Grant

Languages   German (native), English (excellent), Spanish (good), French, Chinese (beginner)
Software Skills   R, LATEX (excellent), Python (advanced), SPSS, STATA (basic)
Personal Information Nationality: Austria
                       Pianist/keyboardist

<u>Work in Progress</u>   *"The power of uncertainty in committees with unequal voting rights"*

(with Georg D. Granic and Alexander K. Wagner)

We study a model of strategic voting under uncertainty in a small committee with potentially conflicting preferences among the members, one of whom – the chair – has the power to break ties. Regular members have incomplete information about the chair's preference type, which represents the information asymmetry typical for power imbalances. We investigate the effect of incomplete information and different priors on the translation of how formal power (the chair's tie breaking power) into real power (whether the chair's preferred option wins).

Applying iterative elimination of weakly dominated strategies (IEWDS), we derive the Bayesian Nash Equilibria. Depending on the distribution of chair types, either the tie-breaking rule takes full effect and the chair's preferred option wins, or the regular members coordinate against the chair. We test these predictions in an incentivized experiment with the beliefs as the treatment parameter (implemented through different commonly known distributions of chair types known to the participants).

We find that the participants exhibit behavior in line with the theorical predictions to a remarkable extent. Their propensity to play optimally increases on average over time and is associated with higher levels of strategic sophistication and their ability to solve games using IEWDS, as elicited in additional experimental tasks. Crucially, the regular members' beliefs determine which equilibrium is established and consequently whether chairs can use their tie-breaking power to push through their preferred option.

"Forecasting with private information and algorithmic support"

(with Daniel Garcia, Juha Tolvanen and Alexander K. Wagner)

We analyse real world data on demand forecasting in a large manufacturing firm. Based on our empirical findings, we model a demand forecasting task in which participants predict future orders of a product, with algorithmic support. Private demand shocks are observed by participants but not by the forecasting algorithm. We investigate how to optimally elicit the private information from human forecasters and combine it with the information processing capabilities of the forecasting algorithm in treatments which differ in the design of the algorithmic support and in the incentives. We are interested in how to maximize predictive power of the forecasts consisting of (i) the time series component, delegated to a forecasting algorithm, and (ii) the private information component which captures demand shocks known to human forecasters. In addition, we examine how biases and heuristics of human forecasters affect the integration of private information into forecasts and hence prediction performance.