

### Academic Career

- Oct '18–Present **5<sup>th</sup> Year Ph.D. Student**, Vienna Graduate School of Economics and Vienna Center for Experimental Economics, University of Vienna, Austria
- **Research Focus:** *Applied Microeconomics with specialisation in Behavioral Economics using experimental methods*
- Sep '16–Aug '17 **MSc. in Economics with First Class (Distinction)**, Department of Economics, University of Warwick, UK
- Oct '13–May '16 **BSc. (with Honours) in Economics**, Department of Economics, University of Warwick, UK

### Working Papers

- Solo authored **Are the more vulnerable doomed? Insights from an Experimental Threshold Public Goods Game (Job Market Paper)**, *Sigma Samhita*
- **Abstract:** Climate change disparately affects different parts of the earth, with catastrophic consequences for some. Coordinated global mitigation efforts can avert this crisis. More vulnerable nations require substantially higher global mitigation efforts than the needs of less vulnerable nations. This raises a coordination problem: what should be the target global effort level? Can high global effort be achieved when it is important only to the more vulnerable? We propose a novel method of heterogeneous thresholds and payoffs using a threshold public goods game. We experimentally find that heterogeneity in vulnerability significantly reduces contributions and coordination on high effort, compared to a homogeneous setting. Coordination on high effort increases when the less vulnerable contributes first. This is achieved by significantly higher contribution of the more vulnerable, which leaves them no better off than if only low effort were achieved.
  - **Link to latest version:** [https://drive.google.com/drive/folders/1eaKJsY0Tahx-Fy10ZLYP42nNykm70h-X?usp=share\\_link](https://drive.google.com/drive/folders/1eaKJsY0Tahx-Fy10ZLYP42nNykm70h-X?usp=share_link)
- Collaborative **Fostering Trust for an Out-group with Gradualism**, *Melis Kartal, Wieland Müller, Sigma Samhita*
- **Abstract:** We present an experimental investigation of the effect of gradualist strategies (trusting little-by-little) on efficiency and trust-fostering for an out-group, compared to binary trust-all-or-nothing strategies. Guided by a revised version of the theoretical model set down by Kartal, Müller and Tremewan (2021), we identified a real world ingroup and outgroup based on linguistic groups in India. Specifically, Tamil students formed the ingroup and non-Tamil students formed the outgroup. To the best of our knowledge, this research is the first work to test gradualism in an innately existing low trust environment, as well as implement repeated interaction in real time among subjects playing a trust game. We conjectured high trust within the ingroup and lower trust for the outgroup. This would give gradualism a chance to foster trust and enhance efficiency in ingroup - outgroup interactions, compared to the binary all-or-nothing strategy. Contrary to our expectations, we find that trust is remarkably low in our sample and gradualism fails to foster any trust. We also find evidence of discrimination only in the Gradual game, not in the Binary, which is contrary to our hypotheses. This work adds to the body of literature that identifies the limits of gradualism as a trust-fostering mechanism, despite its prevalent use in many walks of life.

- **My contribution:** I individually spent over two and a half months in India for data collection. During this time, with the help of a local research firm, I converted a rented space into a technologically sophisticated experimental economics laboratory, which allowed us to implement indefinitely repeated games with stranger matching using computers. I also conducted the experimental sessions and recruited participants for the experiment. In addition, I contributed to the experimental design, data analysis and have co-authored this working paper.

## Work-In-Progress

Collaborative **Markets or Not: Can Money Buy Morals?**, *Christian Koch, Sigma Samhita*

- The idea that markets may erode morals is a long-standing thought in social sciences and a fundamental debate in modern societies. Notable examples include trade in human beings, appropriateness of markets for complex financial products involving high risks or an international market for waste disposal or carbon trading. It is important to ask where markets are appropriate and where they are not. Non-economists like Sandel argue that more fundamentally, pricing can alter the character of a good. The aim of the project is to study the effect of pricing – non-market and market – on environmentally-moral behaviour. To this end, we propose a novel *Flygskam* game. We systematically vary pricing and market interaction to find their individual and combined effects. We are currently in the data collection phase where we conduct the experiment on Prolific with a representative USA and UK sample.
- **My contribution:** I have contributed to the experimental design and to a novel *Flygskam* game, which we introduce in this paper. We are currently in the data collection phase, which I am also contributing actively to. In addition, I will remain an active contributor to the future steps we take to complete this research, for example, in analysis and the co-authoring of this paper.

## Talks & Presentations

- Research Seminar in Microeconomics, University of Vienna (October 2022, June 2021, May 2020) - 75 min talk - *Are the more vulnerable doomed? Insights from an Experimental Threshold Public Goods Game*
- Research Seminar in Microeconomics, University of Vienna (March 2022) - 75 min talk - *Markets or Not: Can Money Buy Morals?*
- Research Seminar in Microeconomics, University of Vienna (November 2020, January 2020) - 75 min talk - *Fostering Trust for an Out-group with Gradualism*

## Undergraduate and Postgraduate Research Experience

Sep '16 - Aug '17 **M.Sc. Thesis**, University of Warwick, under the supervision of **Prof. Christopher Doyle**

- **Thesis Description:** Explored the impact of using e-cigarettes on cigarette consumption in the UK

Jan '17 - Mar '17 **Econometrics Research Project**, University of Warwick, under the supervision of **Prof. Wiji Arulampalam and De. Michele Aquaro**

- **Project Description:** Explored voters' understanding of the economic consequences of their votes

Oct '15 - May '16 **B.Sc. Thesis**, University of Warwick, under the supervision of **Dr. Piotr Jelonek**

- **Thesis Description:** Used quantile models to study if workaholics were at a greater risk of nicotine addiction than alcohol addiction

## Teaching Experience

Mar - Jun 2021, 2022 **Teaching Assistant (In-person, Online)**, Decision and Game Theory (Undergraduate level), University of Vienna, **Course Instructor** - *Prof. Clement Minaudier*

- **Responsibilities:** Taught twice weekly where I solved problem sets, prepared supplemental material to aid understanding of the main course material, graded and provided individual weekly feedback to students on their problem sets solutions, organised help sessions, assisted in the setting of the questions paper for the mid-term and final exams, evaluated answer scripts of mid-term and final exams

## Fellowships and Research Grants

- Recipient of the Uni: Docs fellowship, University of Vienna (10/2019 - 09/2022)
- Co-awarded Diligentia Foundation grant (01/2020)
- Co-awarded research grant by the Vienna Graduate School of Economics (06/2019 - 12/2019)
- Recipient of the Prae-Doc fellowship, awarded by the Vienna Graduate School of Economics, (10/2018 - 09/2019)

## Summer Schools and Conferences

- Summer School on Experiments by Prof. Peter G. Moffat, University of East Anglia - 05/2022
- Summer School on Behavioural Game Theory by Prof. David J. Cooper, University of East Anglia - 05/2022
- Summer School, University of Copenhagen - 04/2020 - 5/2020 (cancelled due to Covid-19)
- Summer School of Advanced Methods in Behavioural Economics, JGU Mainz - 09/2021 - 10/2021 (declined due to research commitments)

## Achievements

- Invited by Avichi College of Arts and Science, Chennai, India to speak on advancements in Behavioural and Experimental Economics
- Invited by the Economics Department of the Indian Institute of Technology, Bhubaneswar to present my MSc research (03/2018)
- Awarded the distinguished MSc in Economics with First Class (Distinction) by the University of Warwick, UK
- Scored 96 in Microeconomics, 85 in Experimental Economics and 89 in Applied Microeconomics in the MSc degree at the University of Warwick, UK.
- Awarded a Distinction (75 - First) in the B.Sc. Dissertation. Topic - Are Workaholics at a greater risk of Nicotine addiction than Alcohol Addiction? A Study using Quantile Models.
- Received nomination for Carroll Round to present my research at Georgetown University (11/2015)

## Computational Skills

- Stata, Python, oTree, Mathematica, LaTeX

## Volunteering work

- Department representative and member of the HR team at AIESEC Warwick
- Delegate Leader to AIESEC UK's Leadership Development Seminar
- Certified trainer by AIESEC to undertake facilitation and training at conferences of AIESEC and others
- Invited by AIESEC UK to manage new talent and their AIESEC Experience
- Volunteered for the British Heart Foundation, helped in the organisation of awareness campaigns and raised funds for Cancer Research UK
- Taught GCSE Mathematics at Woodlands Academy in Coventry, United Kingdom for 2 years as a member of Warwick Volunteers
- Taught Mathematics and English to children of the Aloysha Foundation in primary school in Bangalore, India

## Non-Academic Achievements, Posts of Responsibility and Activities

- Mentor for 2 years in the Economics Briefings Project conducted by the University of Warwick Economics Department
- Author in Chicken Soup for the Indian Soul (4 books) and Letting Go-Dealing with the Grief of Losing a Loved one
- Certified singer of Hindustani Vocal music and an Odissi dancer
- Held 4 leadership positions for 6 years in High School
- Awarded state-level accolades in public-speaking and organised inter-school Model United Nations at Sophia High School in Bangalore India in 2012

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## Languages

Fluent English, Hindi, Odia  
Basic Bengali, French, German

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## References

- **Prof. Martin Kocher**  
Federal Minister of Labour and Economy  
Republic of Austria  
Professor of Economics at the University of Vienna, Austria (currently on sabbatical) [martin.kocher@univie.ac.at](mailto:martin.kocher@univie.ac.at)
- **Dr. Christian Koch**  
Assistant Professor of Economics  
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- **Prof. Karl Schlag**  
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## Links

- Personal website - <https://www.sigmasamhita.com/>