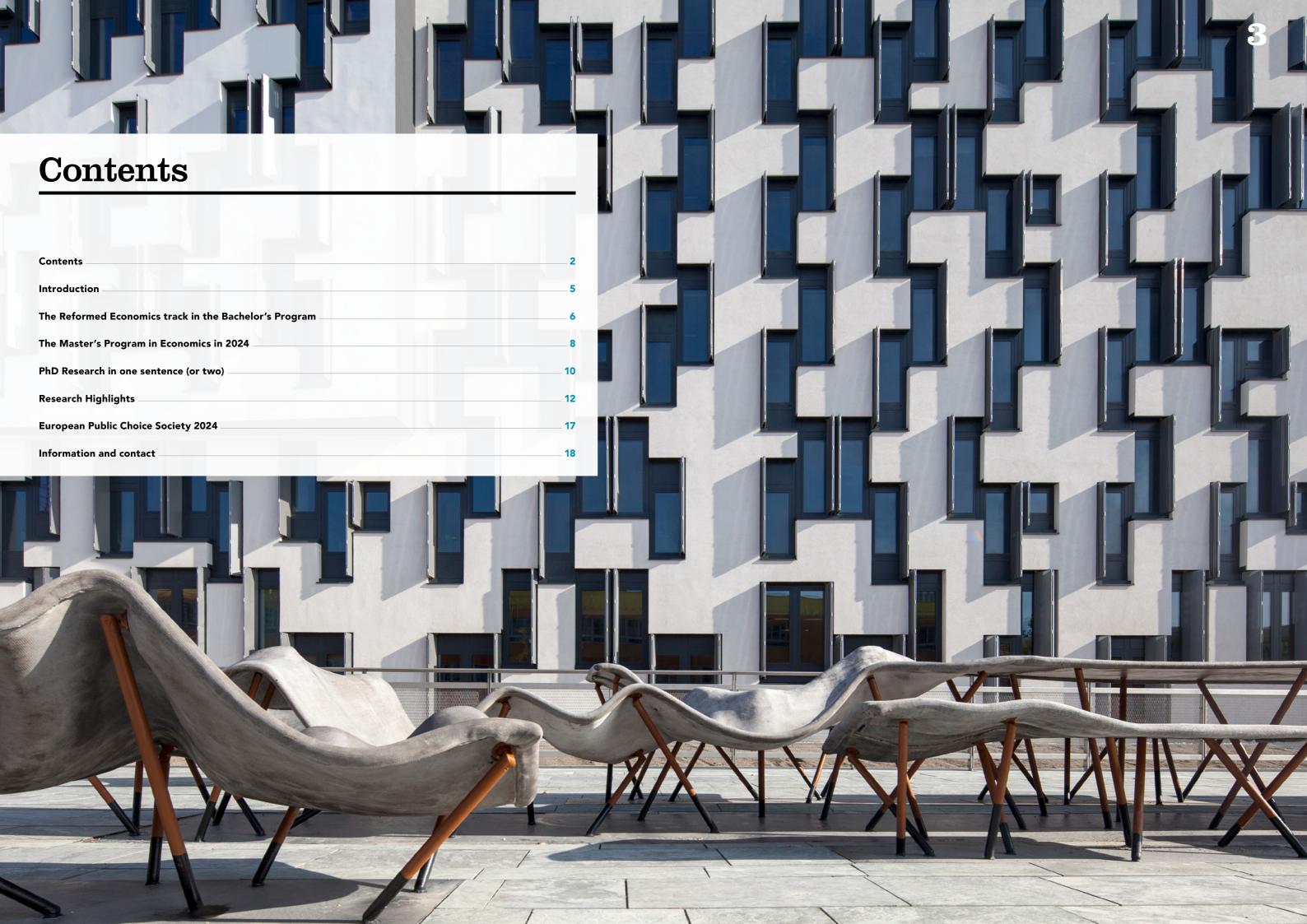
## WU-ECON

The Magazine of the Department of Economics









## Introduction

With this first issue of WU-ECON, the magazine of the Department of Economics of the Vienna University of Economics and Business, we are enhancing the presentation of our annual report. We decided to set the spotlight on selected aspects of our contribution to research, teaching, and third mission, as well as highlight how the work at the department contributes to society and helps shift the global frontier of knowledge. For this purpose, this edition of WU-ECON features several examples of our research output during the last year and showcases the diversity of topics and methods that are present at our department.

The pieces of research we focus on in this issue of WU-ECON are excellent examples of the commitment of our department to scientific rigor and societal relevance. The results of the research projects described in our section "WU-ECON Research Highlights" offer unique insights into the role of socio-economic factors in the spread of fake news, the determinants of the mental health of parents, and the design of efficient agreements among economic agents. In addition, we condense some of the research contributions of our PhD students in the section "Science in one sentence (or two)."

Recent developments in our Bachelor's and Master's programs are also discussed in this issue. Our study programs are becoming increasingly attractive in the global market, and we are particularly proud of the dynamism and flexibility that our department demonstrates when adjustments to the curriculum are carried out.

Our department is extraordinarily active in terms of research communication and participation in scientific discourse. Among many other scientific events, this year we hosted the meeting of the European Public Choice Society, and the highlights of this conference are also featured in this issue.

We sincerely hope that you enjoy WU-ECON and we thank everyone who contributed to our first issue!



Jesús Crespo Cuaresma Department Chair



Gerlinde Fellner-Röhling Deputy Department Chair

# The Reformed Economics track in the Bachelor's Program

The Economics track, attracting approximately 180 new students annually, represents the largest educational program of its kind in Austria. Given this significant responsibility, we strive to offer a modern curriculum that ranks among the best internationally. To ensure this sustainably, regular curriculum reforms are necessary. The reformed BAWISO 2023 Bachelor's program, of which Economics is one of five tracks, began in the winter semester of 2023. The current high demand for courses from our track among students is a positive indicator.

The most significant change in the reform is that the Economics and Socioeconomics track (the latter now named "Economy – Environment – Politics") has become two separate branches. This change has freed up time resources, which we have used to achieve the following goals:

- More Choices for Students: The new program offers more options for students, both within and across the different BAWISO tracks. For example, it is now possible to choose "complementary subjects" worth 20 ECTS credits from other branches. This allows students to either focus solely on Economics or to additionally concentrate on a business specialization or Socioeconomics.
- Improved Study Conditions: Courses now average 6 ECTS credits and are better coordinated in terms of both timing and content. This should increase the feasibility of studying and thereby reduce dropout rates.
- methodological Skills, which are increasingly important for graduates entering the workforce, we have introduced a specialized mathematics course for economists and a course on economic modeling. These courses significantly contribute to our graduates being highly competitive in the job market and having good chances of being accepted into leading international master's programs.

Increased Mobility and Internationalization: The new curriculum is explicitly designed to allow students to spend a semester abroad and have the courses they complete more easily recognized by WU. For students who cannot or do not wish to go abroad, we offer "Internationalization at Home," with designated courses involving increased collaboration with international lecturers and students.

The new design of the Bachelor's in Economics at WU Vienna aims to increase the track's attractiveness and internationalization, improve study conditions, and enhance the graduates' job market opportunities. With these measures, we ensure that our students are optimally prepared for the demands of the modern job market and for further academic programs.



Klaus Prettner
Director of the Economics
track in the Bachelor's
Program

STUDY PROGRAM STRUCTURE: TIMETABLE TOTAL 117 ECTS, 51 CREDIT HOURS)	ECTS	СНо
Economics		
Economic and Social Policy	8	4
Economic Modeling	4	2
Political Economics, Theory and History	4	2
Public Sector Economics	8	4
Advanced Microeconomics	4	2
Advanced Macroeconomics	4	2
Methods of Economics		
Data Bases and Methods of Empirical Economic Research	4	2
Statistics for Economics	4	2
Mathematics for Economics	6	3
Econometrics I	4	2
Econometrics II	4	2
Applied Econometrics	4	2
Advanced Economics		
Choice of specialization courses in economics	24	12
Complementary subjects	20	10
or Two more specialization courses in economics	16	8
or Courses Abroad	20	
Free Electives	5 resp. 9	
Bachelor's thesis	10	

Curricula changes are possible.

#### POSSIBLE COMPLEMENTARY SUBJECTS (COLLECTION):

- > Data Science
- > Economy & Society
- > Finance: Markets, Institutions, and Instruments
- Management and Controlling

## The Master's Program in Economics in 2024

Last year I took over the role of Academic Director for our Master's program in Economics from my colleague Guido Schäfer. Under Guido's aegis, the program was transformed into a modern, English-taught master's program, and I would like to thank my predecessor for his invaluable contributions.

Over the past year, our program has seen unprecedented growth, with a record number of applications coming in from around the globe – from a total of 86 countries! This surge in interest is a testament to the program's reputation and the hard work of our faculty and administrative team. Notably, I am proud to report that more than half of our admissions this year have been offered to female candidates. This is rather uncommon for a master's program in economics and shows our commitment to supporting women opting for a career path in the field.

In response to evolving economic challenges and the dynamic interests of our students, we are thrilled to introduce three new specialization courses starting this winter term: Gender Economics, Environmental Economics and Geo-economics. Gender Economics will explore the economic impact of gender disparities and the policies needed to promote gender equity. Environmental Economics will delve into the economic aspects of environmental policies and sustainable practices. Geo-economics deals with the role of economic policies in our currently very complex geopolitical sphere. These fields are at the forefront of contemporary economic research and thinking, and we believe that offering these specializations will equip our students with insights and practical tools for their future careers.

Another novelty concerns the course registration process for specialization courses. Starting this year, we will implement an auction-based system for signing up. This system aims to enhance efficiency and fairness in the allocation of places, ensuring that students can secure spots in the courses that align most closely with their academic and professional goals. By adopting this market-based approach, we hope to provide a transparent and equitable method for course selection.

I look forward to welcoming a strong new cohort of our Master's program in Economics this autumn. Our record number of applicants and the introduction of novel specialization courses reflect the program's dynamic growth and our commitment to academic excellence.



Florian Szücs Director of the Master's Program in Economics



# PhD Research in one sentence (or two)

"Did you know that, although sectoral emission intensities are expected to fall significantly over the coming decades, total emissions worldwide will not be reduced?"

Vashold, L., Crespo Cuaresma, J. A unified modelling framework for projecting sectoral greenhouse gas emissions. Communications Earth & Environment 5, 139, 2024.

"Exposure to high
temperatures in class and
during exams negatively
impacts students' learning
and cognitive performance in
Indian primary schools.

However, increasing vegetation
around schools can mitigate
these effects, making it a
viable strategy for adapting
to climate change."

Agarwal, S., Ghosh, P., Scarazzato, F.,
Waltl, S. R. The Association between Adverse
Temperature Shocks and Schooling Outcomes
in India: Impact Quantification and Mitigation
Potentials. 2024. Mimeo.

"We evaluate if and to which extent policy can steer innovation towards ecofriendly technologies. Overall, green innovation reacts most strongly to R&D subsidies for renewables, but interaction effects between different policies need to be considered."

Gugler, K., Szücs, F., Wiedenhofer, T. Environmental Policies and directed technological change. Journal of Environmental Economics and Management, 2024, 124, 102916.

"We empirically confirm theoretical predictions given in canonical consumer search models and show that increased price information of consumers can improve the effectiveness of tax policy aimed at easing inflationary pressure on consumer budgets."

Brunninger, L., Dimitrakopoulou L., Gugler, K.
Improving price information of consumers
increases tax pass-through rates in retail
gasoline markets. Mimeo.

"Price regulation successfully mitigates the adverse effects of mergers in pharmaceutical markets and allows consumers to benefit from merging firms' efficiency gains through increased drug variety."

Gugler, K., Pirnbacher, L., Szücs, F. Market power and regulation in pharmaceutical markets. Revise and resubmit, Journal of the European Economic Association.

"We examine the impact of dataset choices on trade policy estimates in structural gravity models, generating 586 estimates of the EU membership trade effects using twelve publicly available data sources and various commonly used dataset restrictions."

Oberhofer, H. & Wang, Z. Everything You Always Wanted to Know About EU Membership Trade Effects But Were Afraid to Ask. Mimeo. "We need to consider the full toolbox of available instruments to tackle the climate crisis (including antitrust policy, public infrastructure investments, targeted taxation and regulatory policy). Carbon pricing policies might not be a panacea to facilitate the just transition in a timely manner."

Matzner, A. & Steininger, L. Firms' heterogeneous (and unintended) investment response to carbon price increases. ECB Working Paper No. 2024/2958.

## Research Highlights



#### **HOW TO DESIGN EFFICIENT AGREEMENTS**

Almost all international, entrepreneurial and research partnerships build on arrangements that contain formal or informal mechanisms with which to resolve disputes. These may be more favorable to one of the agents in the partnership, but this is only learned as disputes arise. How should one design an agreement to ensure that it is efficient? In this project, we investigate efficiency properties of agreements with the following features: (i) self-enforcing – any agent can walk away from the agreement at any moment; (ii) dynamic – payouts occur (stochastically) while the agreement is in force; (iii) risky – one agent is more favored by the agreement, but the favored agent is unknown ex ante.

To model these features we assume each agent has access to a risky arm of a Poisson bandit and a safe outside option. The agreement is only in force if both agents are pulling their respective risky arms. We model the arrival and resolution of disputes as positive outcomes for the winning agent. In this context, a good risky arm increases the likelihood of winning a dispute and securing a lump-sum payoff, while a bad risky arm increases the likelihood of losing a dispute and receiving no payoff.

The agents' risky arms are negatively correlated, reflecting the fact that only one agent is favored by the agreement. Any agent can quit at any time. If one agent quits, the agreement is dissolved and both agents receive their safe payoff. Agents will only enter the agreement if they are sufficiently optimistic that they are favored and will quit if sufficiently convinced they are disfavored. Agreements are, thus, in force for an interval of beliefs. This implies that some efficient agreements are never initiated, and that efficient agreements in force end with certainty.

Our analysis has implications for the design of agreements. We explain how two metrics for agreements – the agents' average payoffs and the longevity of an agreement – are related to agreement characteristics, specifically the frequency of arising disputes. On the one hand, the faster the disputes arise, the higher the average payoff is, as uncertainty is resolved more quickly. On the other hand, we find that slowing down the arrival of disputes can lead to longer agreements, if the agreements involve high stakes. When the agreement exerts an externality on other agents or the agreement designer, less frequent disputes can increase overall welfare.

### "Dynamics of Risky Agreements" (joint work with Renee Bowen and Malte Lammert)



Aleksandr Levkun
is an Assistant Professor
(post doc). He is an economic
theorist specializing in
information economics.
Aleksandr received his Ph.D.
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University of California
San Diego in 2022.



### SONS, DAUGHTERS, AND THE MENTAL HEALTH OF FATHERS

In many cultures, men tend to prefer sons over daughters, a preference documented in various countries. For example, in Austria, 17% of men express a desire for a son, compared to just 5% who hope for a daughter. Interestingly, Austrian women generally prefer daughters. This bias also appears in behavior: first-born daughters are significantly less likely to live with their fathers than are first-born sons.

An ongoing joint research project by Ulrich Glogowsky and Johanna Reuter (both from JKU Linz) explores how the sex of the first child affects the mental health of fathers. The key finding is surprising: while Austrian fathers show a strong preference for sons, their mental health improves when they have daughters instead of sons. Fathers of boys are prescribed significantly more antidepressants than fathers of girls. These effects grow over time and persist in the medium term. For example, ten years after birth, the difference in antidepressant prescriptions is 2.8 percentage points, representing a 165.5% increase compared to the year before the child was born.

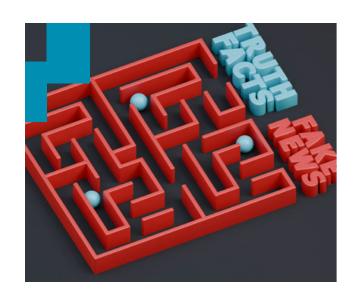
This "son penalty" in mental health challenges the assumption that getting what one prefers always leads to better outcomes. Delving deeper, we found that fathers of sons spend more time on parenting, averaging an extra 15.75 hours per month compared to fathers of daughters. This increased involvement includes demanding and potentially stressful skill-building activities, not only leisure time. Additionally, fathers of sons do not significantly reduce their work hours, leading to greater time pressure and stress, which can negatively impact mental health.

The economic implications of these findings are significant. Fathers with declining mental health may experience reduced productivity, higher healthcare costs, and potential income loss. The intense focus on sons could also create disparities in the emotional and developmental support given to daughters, potentially affecting their long-term well-being and opportunities. Conversely, first-born children are more likely to grow up in environments where fathers struggle with mental health issues.

#### "Son Preference and the Mental Health of Fathers" (joint work with Ulrich Glogowsky and Johanna Reuter)



Martin Halla is a Professor of Economics specializing in Applied Microeconometrics, with a focus on family, labor, and health.



#### **HOW TO SORT FACT FROM FICTION**

What does it take to discern true information and sort facts from fake news? In "Sorting fact from fiction under the shadow of motivated reasoning," we present a comprehensive framework that combines theory with a survey-experimental study carried out in Austria, Germany, and the UK to investigate how the ability to sort fact from fiction and revise opinions based on new information is influenced by cognitive ability, motivated reasoning, and overconfidence. The main component of our survey is a news quiz on four politicized topics: climate change, immigration, science, and inequality.

We predict and find that cognitive ability (i.e., both IQ and educational attainment) improves news discernment on the aggregate. The positive effect of cognitive ability is robust and immune to motivated reasoning. For example, the ability to give correct answers that counter one's existing opinions and preference biases with respect to the issues increases with IQ and education. These novel results are good news, pointing towards a malleability in the ability to sort fact from fiction.

However, when we disaggregate data by news theme, we find that higher cognitive ability may sometimes boost motivated decision-making. For example, in the science section of the news quiz, higher educational attainment is associated with an increased tendency to adhere to one's opinion bias, and higher IQ is associated with an increased tendency to react to new information in a similarly biased manner

Among other findings, the results of our study suggest that trust in institutions matters, as does their quality. For example, trust in institutions reduces the magnitude of motivated reasoning, which in the longer term likely helps limit opinion polarization in a society.

It is vital to improve our understanding of the (biased) thought processes that guide news discernment and the process of keeping up-to-date, because a wide reach of misinformation combined with a declining trust in institutions in many Western countries can have dramatic societal consequences.

"Sorting fact from fiction under the shadow of motivated reasoning" (joint work with Edoardo Cefala, Sylvia Kritzinger and Jean-Robert Tyran)



**Melis Kartal** 

is an Associate Professor.
She specializes in political economy, and behavioral and experimental economics.
Her current research agenda has a particular ffocus on susceptibility to and the effects of fake news.





## European Public Choice Society 2024

From April 2-5, 2024, our department hosted the 51st Meeting of the European Public Choice Society. The European Public Choice Society (EPCS, http://epcs-home.org) promotes scientific research on the economics and politics of public and nonmarket decision-making, political economy, and the economics of institutions. About 300 researchers from different fields such as economics, political science, and other social sciences met at WU to discuss the current issues in all fields of Public Choice and Political Economy, in all their theoretical and empirical dimensions.

Zohal Hessami (Ruhr-University Bochum) and Ekaterina Zhuravskaya (Paris School of Economics) delivered the keynote lectures at the conference. In her presentation, Zohal Hessami showed causal evidence on the effects of policies at the local level, utilizing an identification strategy that makes use of within-party candidate-level races for marginal seats. Ekaterina Zhuravskaya presented evidence from a randomized survey experiment involving actual Twitter users, and developed a novel model of sharing information on social media. Her results indicate that policies that raise the salience of the reputational or social costs of sharing false news are particularly effective, if they do not demand much from users in terms of time and effort.







Ekaterina Zhuravskaya

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