# Marta Boczoń

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## **Academic Positions**

Visiting Assistant Professor, Duke University, US	Jan-May 2025
Assistant Professor, Copenhagen Business School, Denmark	since 2021

# **Short-term Visiting Positions**

Visiting Researcher, Duke University, US	July-Aug 2024
Visiting Researcher, Duke University, US	Jan−May 2024
Visiting Researcher, Duke University, US	Jan-May 2023

## **Education**

Ph.D., Economics, University of Pittsburgh, US	2021
M.A., Economics, University of Pittsburgh, US	2020
M.S., Statistics, Humboldt University of Berlin, Germany	2015
B.A., Quantitative Methods, Warsaw School of Economics, Poland	2012

#### **Research Interests**

**Applied Microeconomics** 

### **Published Research**

Testing Models of Strategic Uncertainty: Equilibrium Selection in Repeated Games (with Emanuel Vespa, Taylor Weidman, and Alistair J. Wilson) **Journal of the European Economic Association** 2024, 00(0), p. 1–31

In repeated games, where both collusive and noncollusive outcomes can be supported as equilibria, it is crucial to understand the likelihood of selection for each type of equilibrium. Controlled experiments have empirically validated a selection criterion for the two-player repeated prisoner's dilemma: the basin of attraction for always defect. This prediction device uses the game primitives to measure the set of beliefs for which an agent would prefer to unconditionally defect rather than attempt conditional cooperation. This belief measure reflects strategic uncertainty over others' actions, where the prediction is for noncooperative outcomes when the basin measure is full, and cooperative outcomes when empty. We expand this selection notion to multi-player social dilemmas and experimentally test the predictions, manipulating both the total number of players and the payoff tensions. Our results affirm the model as a tool for predicting long-term cooperation, while also speaking to some limitations when dealing with first-time encounters.

Goals, Constraints, and Transparently Fair Assignments: A Field Study of Randomization Design in the UEFA Champions League

(with Alistair J. Wilson) Management Science 2023, 69(6), p. 3473-349.

We analyze the design of a randomization procedure in a field setting with high stakes and substantial public interest: matching sports teams in the Union of European Football Association Champions League. While striving for fairness in the chosen lottery— giving teams similar distributions over potential partners—the designers seek to balance two conflicting forces: (i) imposing a series of combinatorially complex constraints on the feasible matches; and (ii) designing an easy-to-understand and credible randomization. We document the tournament's solution, which focuses on sequences of uniform draws over each element in the final match, assisted by a computer to form the support for each draw. We first show that the constraints' effects within this procedure are substantial, with shifts in expected prizes of up to a million euro and large distortions in match likelihoods of otherwise comparable team pairs. However, examining all possible counterfactual lotteries over the feasible assignments, we show that the generated inequalities are, for the most part, unavoidable and that the tournament design is close to a constrained-best. In two extensions, we outline how substantially fairer randomizations are possible when the constraints are weakened, and how the developed procedure can be adopted to more-general settings.

### Balanced Growth Approach to Tracking Recessions

(with Jean-François Richard) **Econometrics** 2020, 8(14), p. 1-35.

In this paper, we propose a hybrid version of Dynamic Stochastic General Equilibrium models with an emphasis on parameter invariance and tracking performance at times of rapid changes (recessions). We interpret hypothetical balanced growth ratios as moving targets for economic agents that rely upon an Error Correction Mechanism to adjust to changes in target ratios driven by an underlying state Vector AutoRegressive process. Our proposal is illustrated by an application to a pilot Real Business Cycle model for the US economy from 1948 to 2019. An extensive recursive validation exercise over the last 35 years, covering 3 recessions, is used to highlight its parameters invariance, tracking and 1- to 3-step ahead forecasting performance, outperforming those of an unconstrained benchmark Vector AutoRegressive model.

# **Working Papers**

Screen vs Scene: Impact of News and TV on Belief Formation (with Natalia Khorunzhina)

This study examines the influence of news and television on belief formation. We analyze public beliefs about serial killing crimes using data from two consecutive online surveys of US residents, comparing the results with both current and historical news as well as content from popular media. We explicitly model belief updating and estimate the causal effect of a movie premiere on beliefs about the typical profiles of victims, killers, and crime locations. Additionally, we examine its impact on individuals' confidence in holding accurate beliefs and their perceived risk of victimization. We find that long-term high consumption of crime news or crime entertainment media in isolation significantly affects beliefs related to the victims' gender. On the margin, we find that a single exposure to a crime-themed film significantly influences certain beliefs about serial killing, resulting in shifts of 0.24 standard deviations in the belief that victims are female, 0.44 standard deviations in the belief that crimes occur in rich counties, and 0.27 standard deviations in the belief that crimes occur in counties with no prior history of serial killing. We do not find evidence of a boost in people's confidence in holding accurate beliefs or an increase in their perceived risk of victimization. This research highlights the role media plays in shaping beliefs, especially in contexts such as terrorism, military conflicts, and international relations, where personal experiences are scarce and access to credible information is limited, often due to national security concerns.

Understanding Variations in Estimates of Wealth Inequality

**R&R** at Applied Economics Letters

As the 2024 US Presidential Election looms, discussions on combating inequality intensify among economists, politicians, and journalists. Proposed measures include instituting a wealth tax, adjusting income tax rates, and revising exemptions. However, the effectiveness of such policies hinges on the accuracy of inequality estimates. Missteps in policy design can lead to adverse economic and social outcomes, emphasizing the need for precise estimations. Drawing from diverse research, this paper investigates conflicting claims on wealth inequality trends over the long and short term. By analyzing data from the Survey of Consumer Finances and the Individual Tax Model Public Use File, it illustrates how methodological choices influence these claims. The study contributes to the literature on wealth inequality dynamics and the use of administrative records for academic research, shedding light on the complexities of inequality measurement and its implications for policy.

# Lab to Algorithm: Predicting Als with Humans, and Vice Versa (with Emanuel Vespa and Alistair J. Wilson)

A now mature literature on repeated prisoner's dilemma has outlined a number of regularities in how human subjects behave. In this literature a core task is to predict when the participants will collude on the jointly cooperative action, and when they will coordinate on the myopic solution: joint defection. Orthogonal to this, a new literature in industrial organization has begun to look at when Artificial Intelligence (AI) pricing agents collude in repeated settings. In this paper we begin to explore the extent to which the regularities that show-up in human subject behavior also manifest in the behavior of pricing agents. While there are similarities, that we document, there are also points of divergence. Moving forwards, the aim is to connect both literatures: Theoretical rules developed for human subjects can be predictive for AI agents, and thereby a useful tool for theoretic exercises in predicting AI in counterfactual settings. Conversely, AI agents can be used to develop insightful experiments to further refine and test our understanding of human behavior through experiments. As such, the tasks of predicting and understanding both human and AI behavior can be symbiotic.

# Scoring from Difficult Angles (with Battista Severgnini)

The allocation of talent is a crucial factor in determining the efficiency, inequalities, and growth trajectories of economies. While theoretical models consistently suggest that one of the main drivers of self-selection into different job market positions is opportunity costs, extensively testing this hypothesis using data proves to be extremely challenging. This paper empirically tests whether the initial conditions at birth can explain self-selection into high-risk (and thus remunerative) tasks. We collect a rich dataset on football players of English nationality and link this information with a set of macro and micro measures of economic performance. Our econometric analysis suggests a negative and significant relationship between the economic condition of the birthplace of players and their future economic performance. Furthermore, these results remain consistent even when changes in opportunity costs are driven by a quasi-experiment based on sudden and significant changes in regional funding from the European Union.

# **Works in Progress**

Under Pressure: The Role of Gender in Risk-Taking Behavior

The Impact of Company Culture on Productivity, Retention, and Absenteeism: A Field Study in a Polish Manufacturing Firm (with Marissa Lepper)

Backfire Effect: The Unintended Consequences of Increased Minority Representation in Media (with Steve Bao)

## Awards, Honors, and Fellowships

Awarded Excellence in Teaching Award, Copenhagen Business School, Denmark	2024
Awarded Excellence in Teaching Award, Copenhagen Business School, Denmark	2023
Invited to the Lindau Nobel Laureate Meeting on Economic Sciences, Lindau, Germany	2022
Awarded Dissertation Fellowship, Federal Reserve Board, US	2019
Invited to the Princeton Initiative, Princeton University, US	2017
Awarded Summer Arts and Science Fellowship, University of Pittsburgh, US	2017
Awarded Arts and Science Graduate Fellowship, University of Pittsburgh, US	2017

## **Professional Activities**

#### **Invited Seminars**

**2024**: University of Copenhagen, Denmark; University of Barcelona, Spain; University of Cyprus, Cyprus; Lund University, Sweden; Vienna University, Austria; University of Pittsburgh, US; Duke University, US; Northeastern University, US; Lehigh University, US

**2021**: University of Padova, Italy (online); Copenhagen Business School, Denmark (online); University of Alberta, Canada (online)

#### Conference Presentations

2025: ASSA 2025 Annual Meeting, San Francisco (US); 2020: International Network for Economic Research Conference, Université Sorbonne Paris Nord, France (online); Delhi Winter School, Delhi School of Economics and the Econometric Society, India (online); Applied Young Economists Webinar, Monash University, Australia (online): Eurasia Business and Economics Society, Madrid, Spain (online). 2019: Delhi Winter School, Delhi School of Economics and the Econometric Society, India; Economics Graduate Students Conference, Washington University in St. Louis, US; Conference on Economic Design, Budapest, Hungry; Queen Mary PhD Workshop, Queen Mary University of London, UK; GW Student Research Conference in Economics, George Washington University, US; H2D2 Research Day, University of Michigan, US; Pitt Day in Harrisburg, Pennsylvania State Capitol, US; Kenneth P. Dietrich School of Arts and Sciences Grad Expo, University of Pittsburgh, US; Eastern Economic Association Annual Meeting, New York City, US. 2018: Conference on Big Data Econometrics with Applications, Bank of Italy, Italy; Midwest Macro Meeting, Vanderbilt University, US; International Academic Conference on Economics of Football. New Economic School, Russia: GW Student Research Conference in Economics. George Washington University, US; Conference on Growth and Business Cycle in Theory and Practice, University of Manchester, UK; Kenneth P. Dietrich School of Arts and Sciences Grad Expo, University of Pittsburgh, US

#### Scientific Activities

Organizer of microeconomics workshop on "Advances in Collective and Individual Decision-Making and Information Economics" with Eric Maskin (Harvard University), Copenhagen Business School, Denmark (Apr 24–25, 2023)

#### Departmental Activities

Organizer of weekly Coffee O'clock meetings with seminar speakers and PhD students, Copenhagen Business School, Denmark (2023–), co-funded by the CBS PhD School. Co-organizer of the Women in Economics Group, jointly with Pengpeng Xiao, Duke University, US (2024)

#### Refereeing

Management Science, Games and Economic Behavior, Journal of Economic Behavior & Organization, Journal of Sports Economics, Central European Journal of Operations Research, Journal of Quantitative Analysis in Sports, Society for Industrial and Applied Mathematics

#### Media Appearances

"The War in the Middle East Can Create Problems for the World Economy," Politiken (Nov 3, 2023)

## **Teaching Appointments**

#### Master's

Applied Econometrics, Copenhagen Business School, Denmark	since 2021
Time Series for Economics, Business, and Finance,	
Copenhagen Business School, Denmark	since 2021

#### Bachelor's

Intermediate Microeconomics I, Duke University, US	2025
Theory and Mechanics Behind Econometrics, Copenhagen Business School, Denmark	2022-2023
Economic Data Analysis, University of Pittsburgh, US	2019
Applied Econometrics, University of Pittsburgh, US	2018

## **Student Supervision**

Master Thesis, Copenhagen Business School, Denmark

**2024:** Felix Padilla Engstrøm; Weikang Ke and Yusuf Muhammed Dyrby; Ulrich Peter Christiansen. **2023**: Mattias Valdemar Högardh; Frede Lindgren and Eskil Volberg; Xaver Mittemayer; Duncan Aleni; Camilla Bergami. **2022**: Giovanni Lumicisi; Caroline Lindegaard & Sina Rust; Jiaman Song and Jiaze Gao

Business Project, Copenhagen Business School, Denmark

**2024:** Felix Mansfeldt Hjorth, Emil Hove Grønager, and Victor Bonnerup Lorentzen; Jacob Holten Poulsen, Johannes Toft Bendtsen, and Huogang Fu; Christian Carl Gartmann and Ulrik Simmelholt. **2023:** Alexander Jørgensen, Phillip Sø Kristensen, Jacob Pedersen, and Gustav Beier-Dahl; Mattias Gregersen, Kasper Aaskov Jørgensen, Jonas Theodor Klussmann, and Kasper Aaskov Jørgensen. **2022:** Frede Lindgren Jørgensen, Julie Rieland Hansen, Eskil Volberg, and Olivia Berrehouc-Kristensen; Max Christian Gerfort, Daniyal Mustafa Chaudhry, Mads Dam Jespersen, and Marco Sebastian Overby Simmini

### **Other Relevant Positions**

Research Assistant to Jean-François Richard, University of Pittsburgh, US	2016 - 2020
Research Assistant to David Huffman, University of Pittsburgh, US	2017
Research Assistant to Martin Gersch, Free University of Berlin, Germany	2014
Research Intern at the Ministry of Finance. Poland	2012

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