






# MAXIMILLIAN MANTEI

## Doctoral Student


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 max-mantei  maxmantei  Maximillian\_Mantei



## EDUCATION

### Doctoral Student in Economics

**University of Hamburg, DFG Graduate School:  
Internationalization of the Law and its Economic Analysis**

 2016 - present  Hamburg, Germany

### MSc Politics, Economics, and Philosophy

**University of Hamburg**

 2013 - 2016  Hamburg, Germany

Grade: 1.3 (CGPA 3.7/4.0)

### BA Political Science and Economics

**University of Bremen**

 2009 - 2013  Bremen, Germany

Grade: 1.6 (CGPA 3.4/4.0)

Erasmus Exchange

**Aarhus University**

 2011-2012  Aarhus, Denmark

### Abitur

**Freie Evangelische Bekenntnisschule Bremen**

 2006 - 2008  Bremen, Germany

Grade: 1.3 (CGPA 3.7/4.0)

## DISSERTATION WORK

### Doctoral Thesis (DFG Scholarship)

**The Law and Economics of Foreign Direct Investment**

- Full Bayesian semi-parametric, hierarchical GLM estimation of FDI flows and stocks using dyadic panel data
- Causal models for endogenous sample selection and missing not at random data to estimate heterogeneous effects of treaty clauses

### MSc Thesis

**Declining Price Anomaly in Dutch Rose Auctions Revisited**

- Replication study accounting for behavioural effects in Dutch auctions
- Hierarchical Bayesian analysis to model individual bidder behaviour

### BA Thesis

**Mechanical and Psychological Effects of Electoral Systems in Western-European Democracies in the Interwar Period**

- Measuring the extend of strategic voting in merging democracies
- Non-linear Regression to quantify party (dis-)advantage due to district magnitude and heterogeneity

## PROFILE

*I'm a quantitative social scientist passionate about hierarchical Bayesian modeling, especially in Stan. I strongly believe in the interplay of domain expertise trough informed priors and quantification of uncertainty through probabilistic reasoning. I love exploring data, building bespoke models, and visualizing key insights.*

## TECHNICAL

R 

Stan 

Python 

Julia 

SQL 

## SKILLS

Data Wrangling 

Statistical Modeling 

Machine Learning 

Data Visualization 

Dashboarding 

## PACKAGES & TOOLS

tidyverse RStan cmdstanr brms  
mcgv glmnet Keras tidymodels  
tf.estimator NumPy Pandas Git  
tf.probability caret AWS  $\LaTeX$   
ggplot2 Selenium Regex  
RMarkdown Jupyter Shiny

## WORK EXPERIENCE

### Self-employed

#### Data analysis and statistical programming

📅 Sep 2014 - present 📍 Hamburg, Germany

### Research Assistant

#### University of Hamburg

#### Faculty of Business Economics and Social Sciences

📅 Oct 2016 - Dec 2017 📍 Hamburg, Germany

- Literature review for course work
- Formatting articles for journal submission

### Research Assistant

#### University of Hamburg

#### DFG research project on distributional justice and procedures

📅 Nov 2015 - Jul 2016 📍 Hamburg, Germany

- Conducting an behavioural economics RCT with real effort tasks
- Summarizing, visualizing, and analyzing collected experimental data

### Research Assistant

#### Ruhr-Universität Bochum

#### Chair of International Economics

📅 Oct 2014 - Sep 2016 📍 Bochum, Germany

- Compilation of an extensive dyadic panel dataset on foreign direct investments and confounding variables used in published research
- Conducting empirical analysis using gravity-type regression models

### Tutor

#### Extracurricular tutorial: Social Choice and Welfare

📅 Sep 2014 - Mar 2014 📍 Hamburg, Germany

### Internship

#### HKM Gesellschaft für Marketingforschung & Beratung mbH

📅 Mar 2013 - Sep 2013 📍 Hamburg, Germany

- Data analysis with focus on the European automotive market
- Developing a methods guideline for practical application of factor models and regression analyses

### Internship

#### Ministry of Economic and Labor Affairs

#### Department of European Funds for Regional Development

📅 Feb 2011 - Apr 2011 📍 Hamburg, Germany

- Quantification and evaluation of public disclosure measures

### Internship

#### SPD Constituency Office Hamburg-Mitte

📅 Aug 2009 - Sep 2009 📍 Hamburg, Germany

- Organization and execution of campaign rallies during BTW2009

### Compulsory Civilian Service

#### Senator for Education and Science

📅 Aug 2008 - May 2009 📍 Bremen, Germany

- Assistance of physically and intellectually disabled children at an inclusive elementary school

## LANGUAGES

German

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English

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Spanish

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## CONFERENCES

ETSG (Volume 14 Number 1)

#### 20<sup>th</sup> Anniversary of the European Trade Study Group

📅 Sep 2019 📍 Bern, Switzerland

StanCon 2019

#### Cambridge University

📅 Aug 2019 📍 Cambridge, UK

StanCon 2018

#### Aalto University

📅 Aug 2018 📍 Helsinki, Finland

AFED 2017

#### 2<sup>nd</sup> Annual Conference of the French Association of Law and Economics

📅 Nov 2017 📍 Aix-Marseille, France

SIDE 2017

#### 13<sup>th</sup> Annual Conference of the Italian Society of Law and Economics

📅 Dec 2017 📍 Rome, Italy

## HOBBIES & OTHER



#### Stan Community Leader

Voluntarily supporting Stan users in statistical and computational issues  
<https://discourse.mc-stan.org/>



#### Music Enthusiast

Passionately listening to, playing, and creating music



#### Band Leader

Co-leading a group of over 20 musicians at our local church



#### Reading News

Interested in world politics, and current and historical affairs



#### Football Stats

Casually gathering, modeling, and visualizing football statistics