

# Martin Stancsics

## Education

2019- **PhD in Economics**, *Universität Zürich*.

2014–2016 MA in Economics, Central European University, Budapest.

2012–2016 Member, Heller Farkas College of Advanced Financial Studies.

Spring 2014 Exchange semester, University of Amsterdam.

2011–2014 **BSs in Economics**, *Corvinus University of Budapest*, Economic and Financial Mathematical Analysis.

## Working experience

2018–2019 Analyst, National Bank of Hungary, Directorate Financial Analysis.

Constructed an IFRS9-compliant model of credit risk for the stress-test of the financial system. Estimated a disequilibrium model of financial constraints. Worked on modeling the effect of EU subsidies on financial constraints.

2016–2018 **Junior analyst**, *National Bank of Hungary*, Directorate Financial Analysis.

Estimated the efficacy and effectiveness of EU subsidies. Estimated and ran satellite models for the stress-test of the financial system.

Summers of Intern, National Bank of Hungary, Directorate Financial Analysis.

2014, 2015 Enhanced a survival model for the probability of default of residential loans with estimate for loan recovery.

#### **Teaching**

Lecturer Programming Practices for Research Students (PhD) | Scientific Python | Introduction to Matlab | Overview of Macroeconomics.

Universität Zürich, Heller Farkas College for Advanced Financial Studies

Teaching Advanced Microeconomics II (MA) | Behavioral Finance (BA) | Analysis I–II

Assistant (BA) | Algebra I–II (BA).

Universität Zürich, Corvinus University of Budapest

## Selected publications

2021 Credit constrained firms and government subsidies: evidence from a European Union program, with Eszter Balogh, Adám Banai, Tirupam Goel, Péter Lang, Előd Takáts, Álmos Telegdy.

BIS Working Papers 984 / MNB Working Papers 2021/5

2020 Unfolding the hidden structure of the Hungarian multi-layer firm network, *with András Borsos*.

MNB Occasional Papers 139

2020 Waste of money or growth opportunity: The causal effect of EU subsidies on Hungarian SMEs, with Ádám Banai, Péter Lang, Gábor Nagy. Economic Systems vol. 44 (1), 100742

2016 Interest rates and asset distributions of naive hyperbolic discounters.

Central European University MA Thesis

#### Conferences

2018 Identifying credit-constrained firms using a disequilibrium model. Financial Stability Christmas Seminar

2018 Visualizing public transport using Python. Budapest BI Forum

2017 Estimating the effect of EU subsidies on Hungarian SMEs. Financial Stability Christmas Seminar

## Computer skills

Languages Python, R, Stata, Matlab, SQL (basics), Rust (basics), Haskell (basics)

Markup and rel. Latex, Markdown, Quarto, Jupyter, HTML, CSS (basics)

Data tools dplyr, data.table, pandas, sqlite

Econometrics base R, Ife, statsmodels

Data viz ggplot2, matplotlib, seaborn, altair, vega-lite, bokeh, datashader

ML and NLP sklearn (basics), keras (basics), nltk, spacy (basics), gensim (basics)

Workflow Git, Snakemake, conda, virtualenv, Renv (basics), Docker, Singularity (basics)

Webscraping requests, selenium, beautifulsoup4

Command line bash, powershell (basics), cmd (basics), ssh

Web dev flask (basics), jekyll, nginx (basics), bokeh server (basics)

## Awards and Scholarships

2019 UBS Center Scholarship.

Universität Zürich

2015–2016 Peter Hangartner Fellowship | Outstanding Academic Achievement Award |

Outstanding MA Thesis Award.

Central European University

2014 Department's Award for Outstanding Achievement.

Corvinus University of Budapest

#### Selected courses

Universität Field Experiments, Behavioral Economics, Neuroeconomic Foundations of Deci-

Zürich sion Making.

ETH Zurich Data Science for Judicial Decision-Making, NLP for Law and Political Economy.

Central European Industrial Organization, Network Science, Agent-based Models, Empirical Indus-

University trial Organization.

University of Econometrics of Duration Data with Macroeconomic Applications.

Crete Advanced Summer School in Economics and Econometrics

Technical Bayesian Inference, Support Vector Machines and Regularized Learning.

University of  $\mbox{ Advanced Statistics and Data Mining Summer School Madrid (UPM)}$ 

#### Languages

Mother tongue Hungarian

Full professional English

Basic German

#### Research interests

- Industrial organization
- Behavioral economics
- Machine learning

- Cooperative game theory
- Ultimatum games with groups
- Natural Language Processing