

Marc Diederichs

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Education

09/2018 - Present: Ph.D. in Economics *Goethe University Frankfurt*, Graduate School of Economics, Finance and Management. Supervisor: Reyn van Ewijk (Johannes Gutenberg-University).

10/2015 - 11/2017: M.Sc. in International Economics and Public Policy *Johannes Gutenberg-University Mainz*, Title of the master's thesis: "The Effect of Parental Age at Birth on Education Outcomes and Wages: An Empirical Analysis with the German SOEP".

10/2012 - 08/2015: B.Sc. in Management and Economics *University Ouest Nanterre la Defense Paris; Johannes Gutenberg-University Mainz*, French-German double degree with a bachelor thesis in the domain of behavioral economics.

Work Experience

04/2018 - Present: Doctoral Researcher *Johannes Gutenberg-University Mainz*, Chair of Statistics and Econometrics (Reyn van Ewijk).

10/2015 - 05/2017: AIESEC *Johannes Gutenberg-University Mainz*, Member of the non-profit student's organization AIESEC. Tasks: contact with businesses from Mainz, organization of a conference with 100 participants.

08/2016 - 08/2016: Voluntary Service *Kenya*, Volunteering work in an orphanage.

05/2015 - 07/2015: Internship at Taxeo *Paris*, Tasks: building up a database about customers, contact with potential new customers and affiliates via telephone.

07/2012 - 09/2012: Internship at the University of Constance *Constance*, Tasks: editorial work, education and training administration.

03/2012 - 06/2012: Voluntary Service *Kenya*, Work as a volunteer in an orphanage for HIV orphans. Tasks: Coaching of homework and German classes, organization of activities.

08/2011 - 10/2011: Internship at Ekkharthof *Swiss*, Tasks: supervision and guidance of handicapped children.

Work in Progress

04/2021 - Present: Is large-scale rapid CoV-2 testing a substitute for lockdowns? *Joint work with René Glawion, Peter G. Kreamsner, Timo Mitze, Gernot J. Müller, Dominik Papies, Felix Schulz and Klaus Wälde.* Various forms of contact restrictions have been adopted in response to the Covid-19 pandemic. Around February

2021, rapid testing appeared as a new policy instrument. Some claim it may serve as a substitute for contact restrictions. We study the strength of this argument by evaluating the effects of a unique policy experiment: In March and April 2021, the city of Tübingen set up a testing scheme while relaxing contact restrictions. We compare case rates in Tübingen county to an appropriately identified control unit. We employ the synthetic control method. We base interpretations of our findings on an extended SEIR model. The experiment led to an increase in the reported case rate. This increase is robust across alternative statistical specifications. This is also due to more testing leading initially to more reported cases. An epidemiological model that corrects for 'more cases due to more testing' and 'reduced testing and reporting during the Easter holiday' confirms that the overall effect of the experiment led to more infections. The number of rapid tests were not sufficiently high in this experiment to compensate for more contacts and thereby infections caused by relaxing contact restrictions.

11/2020 - Present: Does interdisciplinarity in economic research lead to a higher citation impact? *Joint work with Tristan Stahl and Stefan Lobin.* Reading through economic research grant postings, one can notice a frequent and strong emphasis on the importance of interdisciplinarity in research teams. Our project evaluates if this is justified by higher quality research output resulting from interdisciplinary collaborations. We build a theoretical model that facilitates to think about different mechanisms through which interdisciplinarity can lead to better or worse research quality. We identify researchers fields of expertise by their publication histories and measure the quality of publications by their citation count. Using different measures of interdisciplinarity on the paper and the team level we find an inverted U-shape relationship between citation impact and interdisciplinarity of economic research articles.

06/2020 - Present: What can we learn from Editor Rotations? *Single authored project.* In this project I am using bibliometric data on more than 80.000 economic journal articles that were published between 1955 and 2020 to investigate if economists publish more papers in journals where they know the editor(s) personally through a co-author or affiliation connection. Besides the novelty of my data, this project has multiple unique features: First, a panel data set on the researcher level. Second, a distinction between top five and non- top five general interest journals as well as top field journals. Third, an analysis of conflict of interest journal guidelines and their potential beneficial impact on the peer review process as well as fourth, a refined mechanism analyses.

04/2018 - Present: Evaluation of a medical emergency call software. *Joint work with Reyn van Ewijk.* While much is known about emergency health care provision in hospitals, research about the time before patients enter hospitals is scarce. Using the introduction of electronic dispatch protocols (EDP), a software for supporting dispatchers in structuring and standardizing their calls, this research evaluates potential benefits of EDP software. We have dispatch center specific data on emergency call and vehicle allocation and registry data on death causes at our disposal. With a staggered differences in differences approach with county and time fixed effects and allowing for county specific time trends, we find that EDP software (i) increases the time until an emergency vehicle gets alarmed by 4.3% (ii) does affect the accuracy with which emergency vehicles and staff are allocated (iii) does lead to a significant reduction of fatalities from acute myocardial infarction.

Teaching Experience

Winter term 2020/21: Lecture on Introductory Econometrics *Statistics and introduction to simple and multiple regression analysis for first year master students.*

Summer term 2018 - Present: Supervision of 4 Master Theses *Topics: The economic impact of social ties, an empirical analysis using specification-curve analysis; The effect of lecture-style teaching on student test scores, an empirical analysis using specification-curve analysis; Evaluation of a medical emergency call software.*

Summer term 2018 - Present: Supervision of about 50 Bachelor Theses *Topics: Attitudes towards climate change; Determinants and consequences of obesity; Favouritism in academic peer review; The effect of technology on education outcomes.*

Summer term 2016: Tutor in Econometrics *teaching activity in the most advanced undergraduate econometrics course using Stata.*

Scholarships

10/2019 - 09/2020: Deutschlandstipendium *300 Euro per month.*

10/2018 - 09/2019: Deutschlandstipendium *300 Euro per month.*

09/2014 - 08/2015: Erasmus + *270 Euro per month.*

09/2014 - 08/2015: Deutsch Französische Hochschule *250 Euro per month.*

Conferences and Workshops

09/2021: EuHEA PhD Conference (presenting), *Rotterdam, online.*

03/2021: DGGÖ Conference on Health Economics (presenting), *Nuremberg, online*

09/2019: International Health Economics Workshop (visiting), *Mainz.*

04/2019: Summer School on Advanced Econometrics by Prof. J. Wooldridge, *Mainz.*

09/2018: Annual Conference Verein für Socialpolitik (visiting), *Freiburg.*

06/2018: Mini-course on Econometric Analysis of Experimental Data with Prof. C. Bellemare, *Mainz.*

Skills

Languages: German (native), English (fluent), French (advanced)

Software: Stata (advanced), Microsoft Office (advanced), LaTeX (advanced)