

Prof. Melanie Krause, Ph.D.

Curriculum Vitae, July 2021

Personal Information

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ORCID: 0000-0001-9299-2366

Nationality: German Year of Birth: 1984

Family: Partner, 1 Daughter (*2012)

Current Position

09/2015 - **Junior Professor for Macroeconomics**, *Hamburg University*. today Positive Midterm Evaluation ('Zwischenevaluation') in 08/2018

Education

08/2008- Ph.D. in Economics (Summa Cum Laude), Johann-Wolfgang-Goethe

12/2014 Universität Frankfurt.

Structured Ph.D. Program with Fields: Econometrics, Macroeconomics Ph.D. Thesis: *Econometric Advances in the Analysis of Income Inequality Within and*

Between Countries

09/2005- Master of Science in Management (Distinction) and Diplôme de Grande

09/2008 **Ecole (Félicitations du Jury)**, *ESCP-EAP European School of Management, London-Madrid-Paris*.

Multinational program with double degree: 3 countries, 3 languages

Master's Thesis: How Higher Moments Affect Portfolio Choice under Prospect Theory

10/2003- Vordiplom (Undergraduate Studies) in Economics with mark 1,4 ('excelling the studies') in Economics with mark 1,4 ('excelling the studies')

02/2005 **lent')**, Rheinische-Friedrich-Wilhelms-Universität Bonn.

08/1994- Abitur (equivalent to A-Level) with mark 1,0 ('excellent'), Städtisches Gym-

06/2003 nasium Rheinbach.

Professional Experience

- 08/2009- Research Assistant, Johann-Wolfgang-Goethe Universität Frankfurt.
- 07/2015 Working on research projects and teaching tutorial groups at the Chair of International Macroeconomics & Macroeconometrics (Prof. Michael Binder, Ph.D.)
- 05/2008- Student Assistant, ESCP-EAP, Paris.
- 07/2008 Working on a research project at the Finance Chair (Prof. Dr. Emmanuel Jurczenko)
- 04/2007- Intern, Commerzbank España, Madrid.
- 07/2007 Working in Risk Management
- 05/2006- Intern, JPMorgan, London.
- 08/2006 Working in Investment Banking, Equity Derivatives
- 04/2005- Intern, PricewaterhouseCoopers, Düsseldorf.
- 06/2005 Working in Advisory Transactions

Research

Research Fields

Applied Econometrics and Empirical Macroeconomics: Working with Geo-Spatial Data and Machine Learning Methods in

- Economic development
- Urban economics
- Regional economics
- Income inequality

Research Grants

09/2017- German Research Foundation (DFG) Grant for *Shining (New) Light on Re-*08/2020 *gional Inequality, Convergence and Development*.

Principal investigator, jointly with Richard Bluhm and Christian Lessmann. Total project funding for 3 years (2017-2020): 569,000 Euro (individual share: 185,200 Euro)

Publications in Peer-Reviewed Journals

- 2021 Air Pollution in an Urban World: A Global View on Density, Cities, and Emissions (with David Castells-Quintana and Elisa Dienesch), *Ecological Economics*, Forthcoming
- 2021 The Urbanising Force of Global Warming: The Role of Climate Change in the Spatial Distribution of Population (with David Castells-Quintana und Tom McDermott), *Journal of Economic Geography*, Forthcoming
- 2021 Population, Light, and the Size Distribution of Cities (with Christian Düben), *Journal of Regional Science* 61(1), 2021, pp.189-211
- 2020 Rising Mean Incomes for Whom? (with Liang Frank Shao), *PlosOne 15(12)*, 2020, e0242803
- 2019 Convergence vs. The Middle Income Trap: The Case of Global Soccer (with Stefan Szymanski), *Applied Economics* 51(27), 2019, pp.2980-2999

- 2017 The Millennium Peak in Club Convergence A New Look at Distributional Changes in the Wealth of Nations, *Journal of Applied Econometrics 32(3)*, 2017, pp.621-642
- 2014 Parametric Lorenz Curves and the Modality of the Income Density Function, *Review of Income and Wealth 60(4)*, 2014, pp.905-929

Working Papers and Revise & Resubmits

Top Lights - Bright Cities and Their Contribution to Economic Development (with Richard Bluhm), *CESifo Working Paper 7411*, Revise and Resubmit at *Journal of Development Economics*

The Emperor's Geography - City Locations, Nature and Institutional Optimalization (with Christian Düben), SSRN Working Paper 3713325, Revise and Resubmit at Economic Journal

The Geographical Determinants of Within-City Heterogeneity in Urban Density (with André Seidel), CESifo Working Paper 8660

Work in Progress

Regional Convergence at the County Level: The Role of Commuters (with Sebastian Kripfganz)

Growth and Spatial Inequality (with Richard Bluhm and Christian Lessmann)

Smaller Notes

Corrigendum to "Elliptical Lorenz Curves" [J. Econom. 40 (1989) 327 - 338], *Journal of Econometrics* 174, 2013, p.44

Presentations

Conference Presentations

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09/2019	1st FDZ Ruhr Regional Disparity Workshop, Essen, Germany
08/2019	59th European Regional Science Congress, Lyon, France
06/2019	Urban Economics Conference, Amsterdam, Netherlands
11/2018	12th CESifo Workshop on Political Economy, Dresden, Germany
09/2018	Jahrestagung des Vereins für Socialpolitik, Freiburg, Germany
08/2018	58th European Regional Science Congress, Cork, Ireland
05/2018	Workshop on GeoData and Economics, Braunschweig, Germany
05/2018	Urban Economics Conference, Düsseldorf, Germany
03/2018	Royal Economic Society Conference, University of Sussex, Brighton, UK
07/2017	7th ECINEQ Meeting, New York City, US
09/2016	Jahrestagung des Vereins für Socialpolitik, Augsburg, Germany
08/2016	IARIW Conference, Dresden, Germany
08/2016	EEA-ESEM Congress, Geneva, Switzerland
09/2015	Jahrestagung des Vereins für Socialpolitik, Münster, Germany
05/2015	Spring Meeting of Young Economists, Ghent, Belgium
06/2014	1st Conference of the International Association of Applied Econometrics, London, ${\sf UK}$

- 04/2014 Spring Meeting of Young Economists, Vienna, Austria 12/2013 24th (EC)² Conference - Econometric Analysis of Mixed Frequency Data, Nicosia, Cyprus 09/2012 Jahrestagung des Vereins für Socialpolitik, Göttingen, Germany 03/2012 International Atlantic Economic Society Conference, Istanbul, Turkey 02/2012 **RGS Doctoral Conference in Economics**, Duisburg, Germany Seminar Presentations 04/2021 Ifo Institute Munich, Germany, Digital Transformation and Innovation Seminar (online format) 09/2020 German Institute for Global and Area Studies (GIGA) Hamburg, Germany, Seminar in Socio-Economics (online format) 02/2020 Rijksuniversiteit Groningen, Netherlands, Research Seminar 11/2019 Ruhr Universität Bochum, Germany, Regional Economics Seminar 02/2019 Helmut-Schmidt-University Hamburg, Germany, Empirical Research Seminar 06/2018 University of Cologne, Germany, Econometrics Seminar 11/2017 University of Hannover, Germany, Brown Bag Seminar 08/2017 Monash University Melbourne, Australia, Development Economics Seminar 08/2017 University of Queensland, Brisbane, Australia, Economics Seminar 08/2017 Griffith University Gold Coast, Australia, Economics Seminar 06/2017 WU Vienna, Austria, Macroeconomics Seminar 03/2017 University of Umeå, Sweden, Economics Seminar 05/2016 University of Kiel, Germany, Econometrics Seminar 10/2015 University of Hamburg, Germany, Labour Economics Seminar 07/2014 Goethe University Frankfurt, Germany, Money and Macro Brown Bag Seminar 11/2013 Goethe University Frankfurt, Germany, Money and Macro Brown Bag Seminar 10/2011 Goethe University Frankfurt, Germany, Money and Macro Brown Bag Seminar Summer/ Winter Schools 01/2014 9th Winter School on Inequality and Social Welfare Theory, Alba di Canazei
- 9th Winter School on Inequality and Social Welfare Theory, Alba di Canazei (Dolomites), organized by University of Verona, Italy
- 08/2013 **New Developments in Panel Methods Summer School** with lectures by Jeffrey M. Wooldridge, Mainz, Germany
- 06/2011 The Jerusalem Summer School in Economic Growth, Jerusalem, Israel

Conference Organization

05/2019 Workshop on Geo Data in Economics, Hamburg, Germany.

Local organizer of the two-day conference with keynote speakers David Weil (Brown University) and Maxim Pinkovskiy (Federal Reserve Bank New York)

Seminar Organization

Hamburg University

Research Seminar in Quantitative Economics.

Co-Organization in the Summer Semester 2021 (online format), Winter Semester 2020/21 (online format), Summer Semester 2020 (online format), Winter Semester 2019/20, Summer Semester 2019, Winter Semester 2018/19, Summer Semester 2018, Winter Semester 2017/18, Summer Semester 2017, Winter Semester 2016/17, Summer Semester 2016, Winter Semester 2015/16

Doctoral Seminar in Economics.

Organization in the Summer Semester 2021 (online format), Winter Semester 2020/21 (online format), Summer Semester 2020 (online format), Winter Semester 2019/20, Summer Semester 2019, Winter Semester 2018/19, Summer Semester 2018, Winter Semester 2017/18, Summer Semester 2017. Co-Organization in the Winter Semester 2016/17, Summer Semester 2016

Teaching

Hamburg University

Lecturer of Machine Learning Methods in Economics (Master's level).

Winter Semester 2020/21 (online format)

Lecturer of Applied Time Series and Panel Data Econometrics (Master's level).

Winter Semester 2018/19, 2017/18, 2016/17

Lecturer of Topics in Urban Economics (Master's level, seminar).

Summer Semester 2020 (online format)

Lecturer of Economic Growth and Income Distribution (Undergraduate level).

Summer Semester 2019, 2018, Winter Semester 2016/17, 2015/16

Lecturer of Long-Run Economic Development (Undergraduate level, seminar).

Summer Semester 2020 (online format), 2016

Lecturer of Applied Econometrics II (Undergraduate level).

Summer Semester 2016

Johann-Wolfgang-Goethe-Universität Frankfurt

Discussion session instructor of Macroeconomics I (Undergraduate level).

Winter Semester 2014/15, 2013/14, 2012/13, Summer Semester 2012

Teaching assistant of tutorial groups in Macroeconomics I (Undergraduate level).

Winter Semester 2011/12, Summer Semester 2011, 2009

Teaching assistant of the macroeconometrics course International Money and Finance (Master's level).

Winter Semester 2010/11

Pre-Semester course instructor of Real Analysis (Ph.D. and Research Master level).

Winter Semester 2010/11

Rheinische-Friedrich-Wilhelms-Universität Bonn

Teaching Assistant of Production Theory (Undergraduate level).

Winter Semester 2004/05

Thesis Supervision

Ph.D. Thesis Supervision (Hamburg University)

Ongoing Christian Düben

Master's Thesis Supervision (Hamburg University)

- 2021 Narek Mirzoyan, Bohdan Kostiv, Alejandro Parra Cárdenas, Avery Wehner
- 2020 Oyinkansola Osunkoya, Anahit Kirakosyan
- 2019 Bora Lee, Mitchel Graves, Zhexin Zhang, Selcuk Kirbas
- 2018 Eva Cordts, Yagmur Kurtoglu
- 2017 Mengchao Zhang, Adeoye Oyekan, Yan Stegert, Claudia Hernández
- 2016 Logan Carlson

Bachelor Thesis Supervision (Hamburg University)

- 2021 Fawad Ahmad Bajwa
- 2020 Felix Kintrup, Elisa Stumpf, Benedikt Kretzler, Felicitas Bichowski, Helena Blumenschein, Louisa Kirsten, Kyari Yahaya, Robin Denker
- 2019 David Andjelkovic, Lennart Dühren, Phuong Duy Ha, Andrés Grabau, Jude-Ismael Ladouceur, Hoshang Hussainy, Jiaxi Chen
- 2018 Clemens Lehner, Nina Morgenstern, Steven Schlicker, Cheng Huo, Malte Christophersen, Nadine Scherer
- 2017 Steven Ficht, Alexander Weis, Raphael Layer, Nadjim Sarwary, Arber Mehmeti, Christina Preuße, Niklas Pätzold, Frederik Moorkamp
- 2016 Tim Wunderlich, Eugen Bill, Tina-Marie Jung, Moritz Lamparter, Olesja Ischanow

Refereeing

Economic Journal, Review of Income and Wealth, Journal of Economic Inequality, World Development, Oxford Bulletin of Economics and Statistics, Canadian Journal of Economics, Review of International Organizations, Applied Economics, Finanzarchiv, Statistica Neerlandica, Economies, Sustainability

Awards

11/2018 Nachhaltigkeits-Patin for the Sustainable Development Goal "Decreasing Inequalities" by Hamburg University.

Official recognition by the university president and 5000 euro funding for sustainability-related projects

- 08/2014 Invitation to Participate in the 5th Lindau Nobel Laureate Meeting as Young Economist.
- 12/2008 Premier Prix du Mémoire de Recherche.

Prize for the best master's thesis of the year (2000 Euro), awarded by Fondation ESCP-EAP

Machine Learning Course Completion

02/2021 - Natural Language Processing Specialization, DeepLearning. Al via Coursera.

06/2021 Course 4: Natural Language Prcoessing with Attention Models

Course 3: Natural Language Prcoessing with Sequence Models Course 2: Natural Language Prcoessing with Probabilistic Models

Course 1: Natural Language Prcoessing with Classification and Vector Spaces

IT Skills

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Programming Python, incl. SciPy, NumPy, Pandas, scikit-learn, TensorFlow, Trax Very good

STATA, inkl. Mata in STATA

Very good

Matlab

Advanced

Geo-Data QGIS

Tables Excel

Editor LATEX

Good

Very good

Very good

Data Bases SQL Basic

Language Skills

GermanMother TongueEnglishFluent (written and spoken)SpanishFluent (written and spoken)FrenchFluent (written and spoken)NorwegianFluent (written and spoken)

Basic