

## CURRICULUM VITAE

### **Michael W. M. Roos**

#### **Address**

Ruhr-Universität Bochum

Department of Management and Economics

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#### **Positions held**

- Full Professor of Macroeconomics (W3), Ruhr-Universität Bochum, since July 2009
- Lecturer in Economics, University of East Anglia, Norwich, UK, September 2008 – June 2009
- Assistant Professor (Wissenschaftlicher Assistent C1), Chair of Macroeconomics (Prof. Andreas Schabert), University of Dortmund, August 2002 – August 2008
- Research and teaching assistant (Prof. Heinz Holländer), Chair of Macroeconomics, University of Dortmund, April 2001 – July 2002
- Student research and teaching assistant (Prof. Jürgen Eichberger), Chair of Microeconomics, Universität des Saarlandes, September 1998 – March 1999

#### **Education**

- Habilitation (venia legendi in economics), July 2008, Technische Universität Dortmund, thesis "Subjective variables in macroeconomics: moods and expectations"
- Barcelona LeeX Experimental Economics Summer School in Macroeconomics, June 2007, Universitat Pompeu Fabra, Barcelona
- Ph.D in economics (supervisors: Prof. Heinz Holländer, Prof. Wolfgang Leininger, Prof. Wolfram Richter), University of Dortmund, February 2002
- Doctoral program in economics "Resource Allocation, Economic Policy and Collective Decisions", University of Dortmund, April 1999 – February 2002

- Diplom in Economics, Universität des Saarlandes, Saarbrücken, June 1999
- Student of economics at Saarland University, Universidad de Sevilla, and University of Michigan at Ann Arbor, October 1994 – June 1999.

### **Fields of research**

Complexity economics, behavioral economics, experimental economics, ecological economics, expectations, regional economics, climate change, economic methodology

### **Books**

- Principles of complexity economics – Concepts, methods, and applications. Springer Nature (2024)
- Klimaresiliente Kommunalpolitik – Eine Szenarioanalyse für Bochum im Jahr 2046. Springer (2022), with Jan-Hendrik Kamlage and Elias Schmitt (eds).
- Climate economics – A call for more pluralism and responsibility. Palgrave (2020), with Franziska Hoffart
- Ökonomische Agglomerationstheorien – Die Neue Ökonomische Geographie im Kontext, 2002 Josef Eul Verlag (Dissertation)
- Subjective variables in macroeconomics: moods and expectations, unpublished Habilitation thesis

### **Articles in refereed journals**

- Narratives in economics. *Journal of Economic Surveys* (2024), 38(2), 303 - 341  
<https://doi.org/10.1111/joes.12576>, with Matthias Reccius
- Dissimilarity effects on house prices: what is the value of similar neighbors? *Journal of Economic Interaction and Coordination* 18(19), 59 – 86, (2023), with Said Benjamin Bonakdar
- A value-based model of job performance. *PLOS One* 17(1), e0262430, (2022), with Jessica Reale and Frederik Banning
- Modeling radical uncertainty and anticipating uncertain change with models, *Forum for Social Economics* (2021), 50(2), 175 – 193.
- Rethinking economic energy policy research – Developing qualitative scenarios to identify feasible energy policies (2021), *Journal of Sustainable Development of Energy, Water and Environment Systems*, 9(2), 1080331, with F. Hoffart and E.-J. Schmitt,

- Money or morality: fairness ideals in unstructured bargaining (2019), *Social Choice and Welfare* 53, 655 - 675, with W. Luhan and O. Poulsen
- Price-setting with quadratic adjustment costs: experimental evidence (2019), *Journal of Economic Behavior and Organization* 163, 88 – 116, with A. Orland.
- The interdisciplinary approach of the German case study to enable a low carbon economy by hydrogen and CCS (2019). *Energy Procedia* 158 , 3709 – 3714, with S. Flamme, D. Benrath, S. Glanz, F. Hoffart, C. Pielow, R. Span, H.-J. Wagner, A.-L. Schönauer
- Endogenous economic growth, climate change and societal values: a conceptual model (2018), *Computational Economics* 52(3), 995 – 1028.
- Gesamtwirtschaftliche Kosteneinsparpotenziale durch das automatisierte Fahren – Eine ökonomische Abschätzung für Deutschland (2018), *Technikfolgenabschätzung in Theorie und Praxis* 27/2, 23 – 30, with M. Siegmann
- Real time bargaining, payoff focality, and coordination complexity: experimental evidence, *Games and Economic Behavior* (2017), 102, 687 – 699, with A. Poulsen and W. Luhan
- Behavioral and complexity macroeconomics, *European Journal of Economics and Economic Policies: Intervention* (2017), 14(2), 186 - 199
- Agentenbasierte Modellierung und Simulation. Instrument prospektiver Technikfolgenabschätzung (2017), *Technikfolgenabschätzung in Theorie und Praxis* 26/3, 11 – 16, with J. Weyer.
- Die Komplexitätsökonomik und ihre Implikationen für die Wirtschaftspolitik. *Perspektiven der Wirtschaftspolitik* (2015) 16(4), 379 – 392.
- Rational inattentiveness in a forecasting experiment. *Journal of Economic Behavior and Organization* (2013), 94, 80 – 89, with H. Goecke and W. Luhan
- The New Keynesian Phillips Curve with Myopic Agents. *Journal of Economic Dynamics and Control* (2013), 37(11), 2270 – 2286, with A. Orland
- Information, Learning and Expectations in an Experimental Model Economy, *Economica* (2013), 80(319), 513 – 531, with W. Luhan
- Coordination failure caused by sunspots, *Economics Bulletin* (2012) 32(4), 2860 – 2869, with J. Beugnot, Z. Gürgüç, and F. Roose Øvlisen
- The Importance of Time-Series Extrapolation for Macroeconomic Expectations, *German Economic Review* (2011) 13(2), 196 - 210, with Ulrich Schmidt

- Do People Make Strategic Commitments? Experimental Evidence on Strategic Information Avoidance, *Experimental Economics* (2010) 13(2): 206-225, with Anders Poulsen
- Die deutsche Fiskalpolitik während der Wirtschaftskrise 2008/2009, *Perspektiven der Wirtschaftspolitik* (2009) 10(4): 389 - 412
- Willingness to consume and ability to consume, *Journal of Economic Behavior and Organization* (2008) 66: 387 – 402
- Predicting the macroeconomic effects of abstract and concrete events, *European Journal of Political Economy* (2008) 24(1): 192 - 201
- Nonexpert beliefs about the macroeconomic consequences of economic and noneconomic events, *Public Choice* (2007) 132 (3-4): 291 – 304
- Ökonomisches Laiendenken in der Wirtschaftswissenschaft. *Wirtschaftspsychologie* (2007), 4/2007: 25 - 34
- Die makroökonomischen Wirkungen diskretionärer Fiskalpolitik in Deutschland – Was wissen wir empirisch? *Perspektiven der Wirtschaftspolitik* (2007) 8 (4): 293 – 308
- Regional price levels in Germany, *Applied Economics* (2006) 38: 1553-1566
- Earnings Disparities in Unified Germany: Nominal versus Real, *Review of Regional Research (Jahrbuch für Regionalwissenschaft)* (2006) 26: 171-189
- TV weather forecast or look through the window? Expert and consumer expectations about macroeconomic conditions. *Kyklos* (2005) 58(3): 415-437
- How important is geography for agglomeration? *Journal of Economic Geography* (2005) 5: 605-620
- Agglomeration and the public sector. *Regional Science and Urban Economics* (2004) 34: 411-427
- Internationale Integration und die Neue Ökonomische Geographie. *Perspektiven der Wirtschaftspolitik* (2003) 4: 107-121
- Wages and Market Potential in Germany. *Review of Regional Research (Jahrbuch für Regionalwissenschaft)* (2001) 21: 171-195

### **Other publications**

- Climate change from the perspective of complexity economics. In: P. Chen, W. Elsner, A. Pyka (Hrsg.). *Routledge International Handbook of Complexity Economics* (2024), London: Routledge.

- Mobilitätsgenossenschaften als Ergänzung des nachhaltigen Mobilitätsangebots in großen Organisationen. *Ökologisches Wirtschaften* (2024), 39 (3), 42 – 45
- Diskurs statt Dogmatik. Zum Stellenwert von Zukunftsszenarien in der Ökonomik. In: M. Mackasare (Hrsg.). *Zukunftswissen? Potenziale prospektiver Erkenntnis am Beispiel der Energiewirtschaft* (2023). Berlin, Heidelberg: J.B: Metzler.
- Seilbahnsysteme für eine integrierte und nachhaltige Stadtmobilität. In: H. Proff (Hrsg.). *Towards the New Normal in Mobility. Technische und betriebswirtschaftliche Aspekte* (2023). Wiesbaden: Springer Fachmedien, with Marvin Siegmann
- Wie das autonome Fahren die Verkehrswende unterstützt oder gefährdet. In: H. Proff (Hrsg.). *Transforming Mobility. Technische und betriebswirtschaftliche Aspekte* (2022). Wiesbaden: Springer Fachmedien, with Marvin Siegmann
- Mobilitätsnarrative und diskursive Lock-Ins: Hindernisse auf dem Weg zur Mobilität der Zukunft im Ruhrgebiet. In: H. Proff (Hrsg.). *Transforming Mobility. Technische und betriebswirtschaftliche Aspekte* (2022). Wiesbaden: Springer Fachmedien, with Florian Lewalder, Matthis Reccius, Michelle Alfes, Lena Selbach, Leon Tewes und Clara Vollbracht
- Von Softwareentwicklern über Softwareentwicklung. In: Hoeren, Thomas; Pinelli, Stefan (Hrg.). *Künstliche Intelligenz - Ethik und Recht* (2022). München: Verlag C.H.Beck, with Niederstadt, Malte; Schmidt, Nicholas; Timko, Christina.
- Das Mobilitätssystem des Ruhrgebiets im Lock-In (2021), In: H. Proff (Hrsg.). *Making Connected Mobility Work*, 343 - 358. Wiesbaden: Springer Fachmedien, with Florian Lewalder
- Ist die Neoklassik bereit zum Diskurs? *Makronom: Online Magazin für Wirtschaftspolitik* 25.1.2021, with Franziska Hoffart
- Die Einstellungen ökonomischer Nachwuchswissenschaftler/innen zu Pluralismus und Interdisziplinarität, in: C. Fridrich, R. Hedtke, W. Ötsch (Hrsg.), *Grenzen überschreiten, Pluralismus wagen – Perspektiven sozioökonomischer Hochschullehre* (2020), Springer VS, 87 – 110, with. T Bauermann and L. Storcks
- Technologie-Roadmap für das autonome Autofahren – Eine wettbewerbsorientierte Technik- und Marktstudie für Deutschland. Working Paper Forschungsförderung Hans Böckler Stiftung Nr. 188 (2020), with Marvin Siegmann

- Digitale Technologien: Charakteristika, Chancen und Risiken. In: R. Sturn, U. Klüh (eds.). Jahrbuch Normative und institutionelle Grundfragen der Ökonomik, Band 18: Blockchained? Digitalisierung und Wirtschafts-Politik (2020), Metropolis
- Wie offen ist der wissenschaftliche Nachwuchs gegenüber neuen Methoden? Makronom: Online Magazin für Wirtschaftspolitik 21.1.2019, with Tom Bauermann
- Welche Faktoren behindern und fördern neues ökonomisches Denken bei NachwuchswissenschaftlerInnen? Ergebnisse einer Online-Umfrage (2018), Abschlussbericht für das Förderprogramm „Neues ökonomisches Denken“ des Forschungsinstituts für gesellschaftliche Weiterentwicklung, with I. Boldyrev, J. Sprenger, J. Meier, F. Banning.
- Transformationsprozesse und die unterschiedlichen Akteure der Transformation: Ansätze und Einsichten agentenbasierter Modellierungen, in: M. Held, G. Kubon-Gilke, R. Sturn (eds.). Jahrbuch Normative und institutionelle Grundfragen der Ökonomik, Band 16: Kapitalismus, Globalisierung, Demokratie (2017), Metropolis
- Mathematik als Sprache reicht nicht aus. RUBIN Wissenschaftsmagazin (2017), 27(1/17), 32- 35
- An Experiment on Consumption Responses to Future Prices and Interest Rates, with Wolfgang Luhan and Johann Scharler, in: J. Duffy (ed.). Research in Experimental Economics, vol. 17, Experiments in Macroeconomics (2014). Emerald, 139 -166.
- Trust in a Network of Investors and Startup Entrepreneurs, with Anna Klabunde, in: S. Leitner and F. Wall (eds.). Artificial Economics and Self Organization – Agent-Based Approaches to Economics and Social Systems Series (2013). Springer, 147 – 159.
- Agentenbasierte Modelle in der Makroökonomik: Potenziale und Probleme, with Birte Hoffmann, in: M. Held, G. Kubon-Gilke, R. Sturn (eds.). Jahrbuch Normative und institutionelle Grundfragen der Ökonomik, Band 11: Lehren aus der Krise für die Makroökonomik (2012), Metropolis, 213 – 234.
- Die Neue Außenhandelstheorie und die Neue Ökonomische Geographie – Zum Nobelpreis an Paul R. Krugman, *Wirtschaftsdienst* (2008) 88 (11): 756 – 760.

#### **Working papers/ work in progress**

- The complexitx of corporate culture as a potential source of firm profit differentials, arXiv preprint arXiv:2305.14029, (2023), with Jessica Reale and Frederik Banning

- Towards extracting collective economic narratives from texts. Ruhr Economic Papers N. 963 (2022), with Kai-Robin Lange, Matthias Reccius, Tobias Schmidt, Henik Müller and Carsten Jentsch
- Die ökologische Krise und die Rolle der Volkswirtschaftslehre. CURE Discussion Paper No. 1 (2020), DOI: 10.13140/RG.2.2.20694.2720
- POSA: Policy implementation analysis. Ruhr Economic Papers Nr 854 (2020), with Tom Bauermann and Frederik Schaff
- A model of consumer heterogeneity and values. Working paper.
- More foresight, less forecasting in macroeconomics. Paper presented at the conference “Futures Past. Economic Forecasting in the 20<sup>th</sup> and 21<sup>st</sup> Century” at Universität Hamburg, 10-11 October 2018.
- What is the social responsibility of academic economists? Paper presented at the conference “40 years of the Cambridge Journal of Economics” 12 – 13 July 2016
- The macroeconomics of radical uncertainty, Ruhr Economics Papers No. 592
- How do fair value measurements of financial instruments affect investments in banks?, with R. Bergheim and J. Ernstberger, Ruhr Economic Papers No. 487
- Economic beliefs and party preference, with A. Orland, Ruhr Economic Papers No.483
- Intuition and reasoning in choosing ambiguous and risky lotteries, with R. Bergheim, Ruhr Economic Papers No. 440
- As if or what? Expectations and optimization in a simple macroeconomic framework. with Wolfgang Luhan, Ruhr Economic Papers No. 55
- Empirical similarity and Taylor rule: Fed policy investigation - Case-based decision making in the Federal Reserve Bank, with V. Golosnoy and Y. Okhrin, work in progress

### **Externally funded projects**

- Circular Foam – Systemic expansion of territorial CIRCULAR ecosystems for end-of-life FOAM , funded by the European Commission Horizon 2020, funding EUR 820,000 (total EUR 19.2 Mio)
- GenoMobil – Genossenschaften als Organisationsform für eine sozialökologische Transformation integrierter Mobilität, funded by the Federal Ministry of Education and Research, duration: January 2021 – December 2023, funding EUR 515,000 (total EUR 1,500,000)

- InnaMoRuhr – Konzept einer integrierten nachhaltigen Mobilität für die Universitätsallianz Ruhr, funded by the Ministry of Transportation of North-Rhine Westphalia, duration: May 2020 – December 2023, funding EUR 217,000 (total EUR 1,800,000)
- VEPABM - Values and Economic Performance: A formalised agent-based model, funded by Deutsche Forschungsgemeinschaft (DFG), duration: March 2020 – February 2023, funding EUR 420,000
- GOAL – Governance by and of algorithms, funded by the Federal Ministry of Education and Research, duration: September 2019 – August 2021, funding EUR 363,000 (total EUR 2,129,438)
- Wissen in die Gesellschaft bringen: Theorie und Praxis von Politikberatung und Wissenstransfer, funded by Stiftung Mercator, duration October 2019 – September 2022, funding EUR 99,940.
- DS CCCE – Doctoral School Closed Carbon Cycle Economy, funded by the Ministry of Economics, Innovation, Digitalization and Energy of the state North-Rhine- Westphalia, duration: May 2019 – April 2022, funding EUR 285,000 (total EUR 2,964,811)
- DS CCCE - Doctoral School Closed Carbon Cycle Economy, Definition phase, funded by the Ministry of Economics, Innovation, Digitalization and Energy of the state North-Rhine- Westphalia, duration: October 2018 – April 2019, funding EUR 23,000 (total EUR 237,000)
- Technologie-Roadmap für das autonome Autofahren, fundet by Hans Böckler Stiftung, duration: march 2019 – December 2019, funding EUR 9,500
- Go-Net, funded by Emschergenossenschaft/Lippe-Verband, funding EUR 10,000
- ELEGANCY – Enabling the Low Carbon Economy by Hydrogen and CCS; Work package 5: Economic case study for Germany, funded as part of the EU Horizon 2020 programme ERA NET Cofund in the ACT call, duration: 2017 – 2020, funding EUR 146,000 (total of WP 5: EUR 918,000)
- ReSoc – Resources in Society, Leibniz Postdoc School, funded by the Leibniz Gemeinschaft, duration: 2017 – 2019, funding EUR 210,000 (total EUR 960,000)
- New Economic Thinking in PhD Training (Neues ökonomisches Denken in der Doktorandenausbildung – Welche Faktoren behindern und fördern neues ökonomisches Denken bei NachwuchswissenschaftlerInnen?), funded by Forschungsinstitut für gesellschaftliche Weiterentwicklung (FGW), duration: 2016 – 2018, funding: EUR 124,000



- Wealth and Disparity: Comparative Analysis of Trends in Germany and the United States, DFG Seed Funds, funded by Deutsche Forschungsgemeinschaft, duration 2015 – 2016, funding: EUR 18,000
- Ideenwettbewerb des Alfred-Krupp-Schülerlabors der Ruhr-Universität Bochum, Development of a Simulation Game on Societal Transformation due to Automated Driving, duration 2017 – 2018, funding: EUR 5,000.

### **Teaching at Ruhr-University Bochum**

- BSc: Foundations of Macroeconomics; Intermediate Macroeconomics; Monetary Theory and Policy; Case Study Seminar in International Economics; International Economics; Research Topics in Macroeconomics; Agent-based Modeling in Economics and Business; International Finance
- MSc/PhD: Macroeconomics I & II; Macroeconomic Theory; Financial Macroeconomics; Behavioral and Complexity Macroeconomics; Complexity Economics and Agent-based Modeling; Macroeconomic and Financial Governance; Macroeconomics and Sustainability; Macroeconomic Research Seminar (Experiments, Agent-based Modeling); Topics in Advanced Macroeconomics (Seminar)

### **Teaching at University of East Anglia**

- Economics for International Business; Economic Concepts; Principles of Macroeconomics

### **Teaching at University of Dortmund**

- Empirische Makroökonomik; Behavioral and Experimental Macroeconomics; Monetäre Außenwirtschaft; Makroökonomische Theorie; Wachstumstheorie; Fortgeschrittene Wachstumstheorie; Konjunkturprognose; Einführung in die Makroökonomik; Themen der Internationalen Wirtschaftspolitik – Migration

### **Refereeing**

- European Economic Review, Journal of Economic Behavior and Organization, Journal of Economic Dynamics and Control, Journal of Macroeconomics, Journal of Regional Science, Regional Studies, Regional Science and Urban Economics, German Economic Review, Empirica, Experimental Economics, Public Choice, Applied Economics Quarterly, Finanzarchiv, Journal of Economic Geography, Jahrbuch für Regionalwissenschaft, Review

of Regional Studies, Annals of Regional Science, Economics of Governance, Southern Economic Journal, Economic Bulletin, Forum for Social Economics, Journal for General Philosophy of Science, Wirtschaftspsychologie, Perspektiven der Wirtschaftspolitik, Economic Inquiry, Sustainability, Journal of Evolutionary Economics, Forum for Social Economics, Computational Economics, Oxford Review of Economic Policy

- Annual meeting Verein für Socialpolitik, Spring Meeting of Young Economists, RGS Doctoral conference, Social Simulation Conference

### **Memberships**

- Future Earth - Advisory Board of the Finance and Economics Knowledge-Action Network
- NÖBB – Netzwerk ökonomische Bildung und Beratung e.V.
- Evolutionsökonomischer Ausschuss – Verein für Socialpolitik
- Regionalökonomischer Ausschuss – Verein für Socialpolitik
- Verein Freunde und Förderer der Wirtschafts- und Klimaethik e.V.

### **Academic services**

- Co-Speaker of Deans, Ruhr-University Dortmund, October 2020 – July 2023
- Dean, Department of Management and Economics, October 2018 - September 2023
- Research Dean, Department of Management and Economics, January 2013 – September 2018
- Coordinator of the group of economists in the Department of Management and Economics, July 2012 – June 2017
- Member of the university's commission for research and transfer activities, since 2015
- Member of the board of management, Ruhr Graduate School in Economics (RGS Econ), June 2012 – May 2017
- Rectorate's Appointment Commissioner, 2012 - 2015
- Chair of appointment committee for the professorships in innovation economics and innovation management, Ruhr-University Bochum, 2016/2017
- Chair of appointment committee for the professorship in public economics, Ruhr-University Bochum, 2012/2013
- Chair of appointment committee for the professorship in statistics and econometrics, Ruhr-University Bochum, 2011/2012
- Member of faculty council, Ruhr-Universität Bochum, October 2011 – September 2017

- Member of research commission, October 2010 – June 2017
- Organizer of the Bochum International Summer School, since October 2009
- Organizer of the department's research seminar (Volkswirtschaftliches Forschungskolloquium), 2009 - 2013
- Postgraduate admission officer, University of East Anglia, September 2008 – July 2009
- Member of the appointment committee for the professorship in applied economics, University of Dortmund, March 2007 – November 2007
- Member of the appointment committee for the professorship in macroeconomics, University of Dortmund, April 2005 – February 2006
- Member of the faculty council, University of Dortmund, January 2006 – January 2008

Bochum, 10 December 2024