

## Education

### Habilitation in Economics

VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS

Oct. 2020

Vienna, Austria

### Ph.D. in Economics

NEW SCHOOL FOR SOCIAL RESEARCH

2007 - 2012

New York, USA

### MSc. in Economics

LAHORE UNIVERSITY OF MANAGEMENT SCIENCES (LUMS)

2003 - 2004

Lahore, Pakistan

### BSc. (Hons.) in Economics and Management

UNIVERSITY OF LONDON EXTERNAL PROGRAMME

1998 - 2001

Lahore, Pakistan

## Work Experience

### Senior Economist

AUSTRIAN INSTITUTE FOR ECONOMIC RESEARCH (WIFO)

Jun 2022 - present

Vienna, Austria

### Consultant

THE WORLD BANK

Apr 2022 - present

Washington DC, USA

### Research Scholar

INTERNATIONAL INSTITUTE FOR APPLIED SYSTEMS ANALYSIS (IIASA)

Jan 2017 - present

Laxenburg, Austria

### Assistant Professor

VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS (WU)

Oct 2013 - present

Vienna, Austria

### Research Director

CENTER FOR ECONOMIC RESEARCH PAKISTAN (CERP)

Sep 2011 - Aug 2013

Lahore, Pakistan

### Board Member

MICROBE LITERACY INITIATIVE (MLI)

Sep 2009 - present

New York, USA

### Research Associate

LAHORE UNIVERSITY OF MANAGEMENT SCIENCES (LUMS)

Jul 2004 - Jun 2007

Lahore, Pakistan

## Papers and Reports

- World Bank Group (2022). *Pakistan Country Climate and Development Report (CCDR)*. Lead author and coordinator for climate modeling in Chapters 2 and 5.
- Naqvi, A., Onaran, O., and Dunz, N. (2022). Analyzing disaster recovery policies for low-income countries in a 3-Gap framework. *Working paper, International Institute for Applied Systems Analysis (IIASA), Austria*.
- Tanaka, H., Dunz, N., Yoshioka, N., Mochizuki, J., Naqvi, A. (2022). *Building Back Better in Small Island Developing States in the Pacific: Initial Insights from the BinD Model of Disaster Risk Management Policy Options in Fiji*. Asian Development Bank report.
- Zwickl, K., Milkin, X., Naqvi, A. (2022). Sociodemographic disparities in ambient particulate matter exposure in Austria. *Under Review*.
- Dalstein, F., Naqvi, A. (2022). *21st Century Water Withdrawal Decoupling: A Pathway to a more Water-wise World?* *Water Resource and Economics*.
- Naqvi, A., Peer, S., Müller, J., Straub, M. (2022). The spatial-temporal distribution of exposure to traffic-related PM emissions and the role of Shared, Electric Vehicles (SEVs) in Vienna. *Draft in preparation for submission. WU Vienna*.
- Peer, S., Naqvi, A., Müller, J., Straub, M. (2022). Accessibility, socioeconomic and climate impacts of zone-based shared, electric, autonomous vehicles (SAEVs): simulating the case of Vienna. *Draft in preparation for submission. WU Vienna*.
- Cheema, A., Naqvi, A., Naseer, F., Siddiqui, B. (2022). Village Oligarchies and Peasant Republics: The Long-run Effects of Colonial Institutions in Punjab. *Draft in preparation for submission. Lahore University of Management Sciences*.
- Naqvi, A., Monasterolo, I. (2021). *Natural disasters, cascading losses, and economic complexity: A multi-layer behavioral network approach*. *Nature Scientific Reports*.
- Naqvi, A. (2021). *Decoupling trends of emissions across EU regions and the role of environmental policies*. *Journal of Cleaner Production*.
- Peisker, J., Naqvi, A. (2021). Distributional impact of flooding across European regions and sectors. *Working paper, Vienna University of Economics and Business*.
- Dunz, N., Naqvi, A., Monasterolo, I. (2021). *Climate Transition Risk, Climate Sentiments, and Financial Stability in a Stock-Flow Consistent approach*. *Journal of Financial Stability*.
- Naqvi, A. (2021). A systems approach to modelling disasters impacts, cascading losses and economic complexity. *UN OCHA, Geneva*.
- Naqvi, A. (2021). *COVID-19 European Regional Tracker*. *Nature Scientific Data*.
- Naqvi, A., Hochrainer-Stigler, S., Gaupp, F. (2020). *The Risk and Consequences of Multiple Breadbasket Failures: An Integrated Copula and Multi-layer Agent-Based Modelling Approach*. *OR Spectrum*.
- Mochizuki, J., Naqvi, A. (2019). *Reflecting Disaster Risk in Development Indicators*. *Sustainability*.
- de Schutter, L., Bruckner, M., Guljum, S., Häyhä, T., Naqvi, A., Omann, I., Stagl, S. (2019). Sustainable bioeconomy transitions through the lens of coupled social-ecological systems. *Sustainability*.
- Naqvi, A., Stockhammer, E. (2018). *Directed Technological Change in a Post-Keynesian Ecological Macromodel*. *Ecological Economics*.

- Bennett, D., **Naqvi, A.**, Schmidt, W-P. (2018). **Learning, Hygiene, and Traditional Medicine**. *The Economic Journal*.
- **Naqvi, A.**, Monasterolo, I., de Schutter, L. (2018). Modeling the EU Bioeconomy Transition: A Multi-sector Input-Output Stock-Flow Consistent Approach. *Institute for Ecological Economics, WU, Vienna*.
- Brüning, L., **Naqvi, A.** (2018). The role of automation in an aging EU society: Effects of demographic and technological change on pensions in a Stock-Flow Consistent Framework. *Institute for Ecological Economics, WU, Vienna*.
- **Naqvi, A.** (2017). **Geo-simulations as a policy toolkit for natural disasters**. *World Development*.
- **Naqvi, A.**, Zwickl, K. (2017). **Fifty Shades of Green: Revisiting Decoupling by Economic Sectors and Air Pollutant**. *Ecological Economics*.
- **Naqvi, A.**, Rehm, M. (2017). Chapter 13: Agent-based simulations as an early warning system for natural disasters. In book, *Theory and Method of Evolutionary Political Economy: A Cyprus Symposium*, eds. Hardy Hanappi, Savvas Katsikides, Manuel Scholz-Wäckerle. Routledge, UK.
- Bennett, D., **Naqvi, A.**, Schmidt W-P. (2015). **Constraints on Compliance and the Impact of Health Information in Rural Pakistan**. *Health Economics*.
- **Naqvi, A.**, Rehm, M. (2014). **A Multi-Agent Model of a Low Income Economy: Simulating the Distributional Effects of Natural Disasters**. *Journal of Economic Interaction and Coordination*.
- Jackson, T., Victor, P., **Naqvi, A.** (2015). **Towards a Stock-Flow Consistent Ecological Macroeconomics**. *ESRC Passage Working paper Series 15-02*.
- **Naqvi, A.** (2015). **Modeling Growth, Distributions and the Environment in a Stock-flow consistent Framework**. *WWWforEurope Policy Paper 18*.
- **Naqvi, A.**, Rehm, M. (2014). **Simulating Natural Disasters - A Complex Systems Framework**. 2014 IEEE Conference Proceedings on Computational Intelligence for Financial Engineering & Economics (CIFer), 27–28 March, London, UK.

## Projects

### Programmatic Climate Economics Capacity Building Initiative to Advance a Whole-of-Economy Approach

EFICE, THE WORLD BANK (USA)

2022 – 2023

### Robust supply chains for agricultural goods and food in Austria (ROBVEK)

FEDERAL MINISTRY OF AGRICULTURE, REGIONS AND TOURISM (BML, AUSTRIA)

2022 – 2023

### Pakistan's Climate Change Development Report (CCDR)

THE WORLD BANK (PAKISTAN, USA)

2022 – 2022

### Distributional effects of climate shocks – A macroeconomic perspective (DiOD)

AUSTRIAN NATIONAL BANK (ÖNB, AUSTRIA)

2021 – 2023

### Scaling-up green finance to achieve the climate and energy targets: An assessment of macro-financial opportunities and challenges for Austria (GREENFIN)

AUSTRIAN CLIMATE RESEARCH PROGRAM (ACRP, AUSTRIA)

2019 – 2021

### An empirical analysis of environmental inequality in the EU (EnvINEQEU)

AUSTRIAN SCIENCE FUND (FWF, AUSTRIA)

2019 – 2022

### Simulating the environmental and socio-economic effects of shared autonomous electric vehicles: The case of Vienna (SIMSAEV)

AUSTRIAN CLIMATE RESEARCH PROGRAM (ACRP, AUSTRIA)

2018 – 2021

### Possibilities of consciously shaping mobility through the application of the principle of sufficiency in the Austrian context (MOBALANCE)

AUSTRIAN RESEARCH PROMOTION AGENCY (FFG, AUSTRIA)

2018 – 2019

### Sustainable Growth in the Presence of Complex Financial Markets

AUSTRIAN NATIONAL BANK (ÖNB, AUSTRIA)

2017 – 2019

### Internal Displacement Risk (IDR)

OFFICE OF U.S. FOREIGN DISASTER ASSISTANCE (USAID-OFDA, USA), IDMC (SWITZERLAND)

2017 – 2018

### Pathways towards a Prosperous and Just EU Bioeconomy (BIOWAY)

AUSTRIAN NATIONAL BANK (ÖNB, AUSTRIA)

2016 – 2018

### Welfare, Wealth and Work for Europe (www4europe)

HORIZON 2020 (VIENNA, AUSTRIA)

2012 – 2016

### Microbe Literacy Health Initiative (MLI)

UBS OPTIMUS FOUNDATION (SWITZERLAND)

2013 – 2016

### Building Capacity to use Research Evidence (BCURE)

DEPARTMENT FOR INTERNATIONAL DEVELOPMENT (DfID, UK)

2014 – 2019

### Centers for Learning on Evaluation and Results (The CLEAR Initiative)

THE INDEPENDENT EVALUATION GROUP (IEG, WORLD BANK, USA)

2012 – 2016

# Thesis supervision

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2022	<b>The Effects of Unilateral Climate Policies: The effects of Carbon Leakages, on competitiveness, and Pollution Havens</b>	WU Vienna
2020	<b>21st Century Water Withdrawal Decoupling</b>	WU Vienna
2019	<b>The Macroeconomic Impacts of Floods across European Regions and Sectors</b>	WU Vienna
	<b>A stock-flow consistent model assessment of the opportunities and risks of development bank's efforts of closing the climate-finance gap</b>	WU Vienna
2018	<b>Automation in an aging EU society: Effects of demographic- and technological change on pensions in a Stock-Flow Consistent Framework</b>	WU Vienna
	<b>Investigating climate adaptation in semi-arid regions as complex adaptive social-ecological systems: An integrated modeling approach</b>	Chinese Academy of Sciences, China
	<b>Skills resilient to impending automation: The future of work</b>	Pardee RAND, USA
2017	<b>Vulnerability is dynamic: Approaching the emerging challenges of coastal tourism</b>	Wageningen University, Netherlands
	<b>Drivers and barriers: what institutional factors affect the operationalization of the Circular Economy? A conceptual framework and its application: a case study of the Netherlands</b>	WU Vienna
2016	<b>Environmental Policy and Technical Change in a North-South Stock-Flow Consistent Model</b>	WU Vienna

## Miscellaneous

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### Data science projects

- [The Climate Economics Literature Tracker](#)
- Author of various Stata packages: [schemepack](#), [clipgeo](#), [delaunay](#), [streamplot](#), [joyplot](#), [bimap](#), [marimekko](#), [arcplot](#), [circlepack](#), [treemap](#), [spider](#), [circlebar](#), [alluvial](#), [sankey](#)
- Co-authored Stata package [drdid](#) based on [Sant'Anna and Zhao \(2020\)](#).
- [The Stata Guide on Medium](#)
- [The Stata Gallery on Medium](#)
- [COVID-19 European Regional Tracker](#)
- [The Difference-in-Difference Guide](#)
- [COVID-19: Visualizing regional socioeconomic indicators for Europe](#)

### Reviewing activities

- Nature Climate Change, Nature Human Behavior, Climate Policy, Climatic Change, Journal of Financial Stability, Journal of Cleaner Production, Ecological Economics, International Journal of Disaster Risk Reduction, Regional Environmental Change, Journal of Evolutionary Economics, Environmental Economics and Policy Studies, European Sociological Review, Journal of Economic Interaction and Coordination, Austrian National Bank (ÖNB), Federal Ministry of Education and Research (BMBF, Germany)

### Skills

- **Softwares:** Proficient in Stata, QGIS, ArcGIS, NetLogo, Mathematica, Markdown, LaTeX. Working knowledge of R, MATLAB, Python, Ruby, C++, JavaScript.
- **Languages:** English (High proficiency), German (B2), Urdu (Native)