

# ASJAD NAQVI

*Research Scholar*

International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria

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## EDUCATION

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<b>Ph.D. Economics</b> New School for Social Research, New York, USA	Sep. 2007 - May. 2012
<b>M.Sc. Economics</b> Lahore University of Management Sciences, Lahore, Pakistan	Sep. 2003 - Jun. 2004
<b>B.Sc. (Hons.) Economics and Management</b> University of London External Programme, Lahore, Pakistan	Sep. 1998 - Jun. 2001

## WORK EXPERIENCE

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<b>International Institute for Applied Systems Analysis (IIASA)</b> <i>Research Scholar</i>	Jan. 2017 – present
<b>Vienna University of Economics and Business (WU)</b> <i>Assistant Professor</i>	Oct. 2013 – Nov. 2019
<b>Center for Economic Research Pakistan (CERP)</b> <i>Research Director</i>	Sep. 2011 – Aug. 2013
<b>Lahore University of Management Sciences (LUMS)</b> <i>Research Associate</i>	Jul. 2004 – Jun. 2007
<b>University of London External Programme</b> <i>Lecturer</i>	Jul. 2001 – Jun. 2004

## PUBLICATIONS IN PEER-REVIEWED JOURNALS

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- 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*. DOI: 10.1007/s00291-020-00574-0
- 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* 11(20), 5705. DOI: 10.3390/su11205705
- Mochizuki, J., **Naqvi, A.** (2019). Reflecting Disaster Risk in Development Indicators. *Sustainability* 11(4) 996. DOI: 10.3390/su11040996
- Naqvi, A.**, Stockhammer, E. (2018). Directed Technological Change in a Post-Keynesian Ecological Macromodel. *Ecological Economics* 154 (164–188). DOI: 10.1016/j.ecolecon.2018.07.008
- Bennett, D., **Naqvi, A.**, Schmidt, W-P (2018). Learning, Hygiene, and Traditional Medicine. *The Economic Journal* 128 (612). DOI: <https://doi.org/10.1111/eoj.12549>
- Naqvi, A.** (2017). Geo-simulations as a policy toolkit for natural disasters. *World Development* 99, 395–418, DOI: 10.1016/j.worlddev.2017.05.015.
- Naqvi, A.**, Zwickl, K. (2017). Fifty Shades of Green: Revisiting Decoupling by Economic Sectors and Air Pollutant. *Ecological Economics* 133, 111–126. DOI: 10.1016/j.ecolecon.2016.09.017
- Bennett, D., **Naqvi, A.**, Schmidt W-P (2015). Constraints on Compliance and the Impact of Health Information in Rural Pakistan. *Health Economics* 24(9), 1050–1064. DOI: 10.1002/hec.3193
- 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. DOI: 10.1109/CIFEr.2014.6924103

**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*, 9(2) 257–309. DOI: 10.1007/s11403-014-0137-1

## WORKING PAPERS, REPORTS, BOOK CHAPTERS

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Dunz, N., **Naqvi, A.,** Monasterolo, I. (2019). Climate Transition Risk, Climate Sentiments, and Financial Stability in a Stock-Flow Consistent approach. *Revise and resubmit, Journal of Financial Stability*.

**Naqvi, A.,** Zwickl, K. (2020). Regional Decoupling of Air Emissions from Output and Employment in the EU. *Draft*.

**Naqvi, A.,** Monasterolo, I. (2019). A Multilayer Network Approach to Modeling Transition Pathways of Climate Shocks. *WU Institute for Ecological Economics Working paper*.

Zwickl, K., Laurent, E., **Naqvi, A.** (2019). Air (In)Quality in the EU. *Draft*.

Dunz, N., **Naqvi, A.,** Mochizuki, J., Schinko, T. (2019). Developing an integrated catastrophe-macroeconomic modeling framework: the role of saving constraints for developing countries. *Draft*.

Cheema, A., **Naqvi, A.,** Naseer, E., Siddiqui, B. (2018). Historic land institutions, inequality, and long-run development: Evidence from Punjab. *Working paper*

Rehm, M., **Naqvi, A.,** Hofmann, J. (2018). Class-less? Wealth, Income, and the Crisis in Europe. *Working paper, Arbeitskammer Wien*.

**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, pp.214–235. Routledge, UK.

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. WWW-forEurope Policy Paper 18.

**Naqvi, A.** (2012). Coping Mechanisms and Inequality in a Multi-agent Framework. *Working Paper. International Institute for Applied Systems Analysis (IIASA)*.

**Naqvi, A.,** Sobiech, C. (2010). Simulating Humanitarian Crisis and Socio-Economic Vulnerability: Applications of Agent-Based Models. United Nations University – Institute for Environment and Human Security SOURCE 13.

## GRANTS

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**Scaling-up green finance to achieve the climate and energy targets: An assessment of macro-financial opportunities and challenges for Austria (GREENFIN)** 2019 – 2021  
*Austrian Climate Research Program (ACRP)*

**An empirical analysis of environmental inequality in the EU (EnvINEQEU)** 2019 – 2020  
*Austrian Science Fund (FWF)*

**Simulating the environmental and socio-economic effects of shared autonomous electric vehicles: the case of Vienna (SIMSAEV)** 2018 – 2020  
*Austrian Climate Research Program (ACRP)*

**Possibilities of consciously shaping mobility through the application of the principle of sufficiency in the Austrian context (MOBALANCE)** 2018 – 2019  
*FFG (Austria)*

**Sustainable Growth in the Presence of Complex Financial Markets** 2017 – 2019  
*ÖNB Jubiläumsfond (Austria)*

**Internal Displacement Risk (IDR)** 2017 – 2018  
*IDMC (Switzerland), USAID-OFDA (USA)*

**Pathways towards a Prosperous and Just EU Bioeconomy (BIOWAY)** 2016 – 2018  
*ÖNB Jubiläumsfond (Austria)*

<b>Microbe Literacy Health Initiative (MLI)</b> <i>UBS Optimus Foundation (Switzerland)</i>	2013 – 2016
<b>Building Capacity to use Research Evidence (BCURE)</b> <i>Department for International Development (DfID) (UK)</i>	2014 – 2019
<b>Centers for Learning on Evaluation and Results (The CLEAR Initiative)</b> <i>Multiple donors via the World Bank (USA)</i>	2012 – 2016

## REFEREEING ACTIVITIES

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**for Peer-reviewed journals:** Nature Climate 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

**for Research proposals:** Oesterreichische Nationalbanks Jubiläumsfonds (Anniversary fund of the Austrian National Bank)

## RECENT SUPERVISION ACTIVITIES

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### **Masters' Theses in the SEEP Program, WU**

The Macroeconomic Impacts of Floods across European Regions and Sectors	2019
Automation in an aging EU society: Effects of demographic- and technological change on pensions in a Stock-Flow Consistent Framework	2018
Drivers and barriers: what institutional factors affect the operationalisation of the Circular Economy? A conceptual framework and its application: a case study of the Netherlands	2017
The United States Well-being Index: A Composite Indicator for the Measure and Improvement of Sustainable Development in the United States	2017
Environmental Policy and Technical Change in a North-South Stock-Flow Consistent Model	2016

### **Supervision of PhD Students at IIASA's Young Scientist Summer Program (YSSP)**

A stock-flow consistent model assessment of the opportunities and risks of development bank's efforts of closing the climate-finance gap (WU, Austria)	2019
Investigating climate adaptation in semi-arid regions as complex adaptive social-ecological systems: An integrated modeling approach (Chinese Academy of Sciences, China)	2018
Skills resilient to impending automation: The future of work (Pardee RAND Graduate school, USA)	2018
Vulnerability is dynamic: Approaching the emerging challenges of coastal tourism (Wageningen University, Netherlands)	2017

## TEACHING

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<b>SEEP Masters' Program, WU</b> <i>Vienna University of Economics and Business (WU), Vienna, Austria</i>	2014 – 2019
Environmental Change and Policy II (3 semesters)	2017 – 2019
Growth, Well-being, and Development (2 semesters)	2015 – 2016
Bridging Course: Economics (2 semesters)	2014 – 2015
<b>Graduate level courses on Computer languages</b> <i>New School for Social Research, New York, USA</i>	2007 – 2010
Taught Stata, Mathematica, and Netlogo	
<b>LUMS Masters' in Economics program</b> <i>Lahore University of Management Sciences (LUMS), Lahore, Pakistan</i>	2005 – 2006
Taught Development Economics, Econometrics I	
<b>University of London External Program, Bachelors' degree</b> <i>University College Lahore, Lahore, Pakistan</i>	2001 – 2005

Taught Mathematics for Economists, Advanced Mathematics for Economists, Quantitative Methods, Management Mathematics, Advanced Statistics, Econometrics.

## SELECTED CONFERENCES AND TALKS

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Coupled climate-ecology-economy modeling and model hierarchies, Institut Henri Poincare (Paris, France)	Dec. 2019
Annual Conference of the Gesellschaft für Regional Forschung (GfR) European Regional Science Association (ERSA) (Matrei in Osttirol, Austria)	Feb. 2019
20th Annual Austrian Climate Center meeting (Klimatag) (Vienna, Austria)	Apr. 2019
Annual Conference of the European Association Evolutionary Political Economy (EAEPE) (Nice, France)	Oct. 2018
Navigating systemic risks and opportunities at the land-water-energy-climate-security nexus Knowledge Systems for Sustainability Collaborative (KSS) and Klima-KIC (EC) (Trento, Italy)	Jul. 2018
Annual Conference of the Gesellschaft für Regional Forschung (GfR) European Regional Science Association (ERSA) (Innsbruck, Austria)	Feb. 2018
Uncovering the hidden cost of internal displacement Internal Displacement Monitoring Cell (IDMC) (Geneva, Switzerland)	Apr. 2018
Annual Conference of the European Association Evolutionary Political Economy (EAEPE) (Budapest, Hungary)	Oct. 2017
Instructor for the FMM Summer School (Berlin, Germany)	Jun. 2017
European Society for Ecological Economics (ESEE), (Budapest Hungary)	Jun. 2017

## SKILLS

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**Languages:** English (High proficiency), Urdu (Native), German (B1 certification)

**Computer languages:** Proficient in Stata, ArcGIS, NetLogo, Mathematica. Working knowledge of R, MATLAB, Python.

**Project management:** Eight years of experience in survey design, piloting and testing surveys, designing and implementing field management and data management protocols for various internationally-funded projects (World Bank, DFID, USAID, CIDA, AUSAID, IGC, 3IE, IZA, Optimus Foundation).

**Trainings:** Certified trainer, Poverty Action Lab (J-PAL), MIT.

## MISCELLANEOUS

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Organized IIASA Workshop on Migration Modeling	Sep. 2017
Organized IIASA Workshop on Green Growth	Jul. 2017
Best Poster Award at the ISEE Conference, Budapest, Hungary	Jun. 2017
Lead for the Macroeconomics and the Environment group, Institute for Ecological Economics, WU	2017 – 2019
Eduard-März Prize for the best paper at the AK Young Economists Conference (Austria)	Oct. 2014
IIASA Young Scientist Summer Program (YSSP) 2012	Summer 2012
Fulbright Scholarship	2007 – 2011
Conducted several training workshops on evidence-based decision making for policymakers in collaboration with CERP, J-PAL (MIT), and EPoD (Harvard)	2011 – 2014
Active member of Crisismappers and Hacking for Humanity communities	2007 – 2012
Winner of the 2006 Stockholm Challenge for RISEPAK, one of the first crowd-sourced portals for disaster relief efforts.	2006