Roweno J.R.K. Heijmans

This version: October 2020

Office K.302 Warandelaan 2, 5037 AB Tilburg The Netherlands

E-mail: r.j.r.k.heijmans@uvt.nl Website: www.roweno.nl Mobile: +31 6 25 02 02 55

Personal Details

Name: Roweno Johannes Ryan King Heijmans

Address: Bataviastraat 48, 5014 BV, Tilburg, the Netherlands

Education

2017/21 Ph.D. Candidate, Economics, Tilburg University, the Netherlands

Expected date of graduation: Summer 2021

2017 Research Master, Economics, Tilburg University, the Netherlands

2015 **BSc, Economics**, Tilburg University, the Netherlands

Research

Job Market Papers

"SEQUENTIAL GLOBAL GAMES"

Abstract: Global games are incomplete information games where players receive private noisy signals about the true game played. In a sequential global game, the set of players is partitioned into subsets. Players within a subset (of the partition) play simultaneously but no two subsets move at the same time. The resulting sequence of stages introduces intricate dynamics not encountered in simultaneous move global games. We show that a sequential global game with strategic complementarities and binary actions has at least one equilibrium in increasing strategies. However, even with vanishing noise the general equilibrium uniqueness of one-shot global games breaks down: even a simple two-stage sequential global game does not generally have a unique equilibrium surviving iterated dominance. The reason is that the history of play may force players to believe that the true game is in fact "far away" from their signal – a possibility that does not arise in one-shot game and that is crucial in proving uniqueness. We present sufficient conditions for the sequential global game to have a unique equilibrium that survives iterated dominance.

"THE GLOBAL CLIMATE GAME"

Abstract: This paper studies emissions abatement in a global game of technological investments. Players invest in competing technologies. One technology is cheap and dirty, the other expensive but green. Technological investments are strategic complements. While such games typically have multiple equilibria, uncertainty about the green technology's true potential leads to the selection of a unique equilibrium, which may be inefficient. I specify sharp conditions under which the green technology is universally adopted. Implications for the design of domestic and international policies are discussed.

Publications in peer-reviewed journals

- "CLIMATE-CONSCIOUS CONSUMERS AND THE BUY, BANK, BURN PROGRAM", with Reyer Gerlagh. *Nature Climate Change*, 2019.

The buy, bank, burn scheme we propose in this paper is being implemented by three NGOs: ForTomorrow, Compensators, and CAP₂.

- "COVID-19 TESTS THE MARKET STABILITY RESERVE", with Reyer Gerlagh and Knut Einar Rosendahl. Environmental and Resource Economics, 2020.

Working Papers

- "AN ENDOGENOUS EMISSION CAP PRODUCES A GREEN PARADOX", with Reyer Gerlagh and Knut Einar Rosendahl. Conditionally accepted at *Economic Policy*
- "REGULATING STOCK EXTERNALITIES", with Reyer Gerlagh. Submitted.
- "Efficient epidemics: Contagion, control, and cooperation in a global game", with Ana Moura. Submitted.
- "LINKING CAP-AND-TRADE SCHEMES UNDER ASYMMETRIC UNCERTAINTY", with Reyer Gerlagh

Work in Progress

- "ENDOGENOUS EMISSION CAPS ALWAYS PRODUCE A GREEN PARADOX", with Reyer Gerlagh and Knut Einar Rosendahl.

Book Chapters

Gerlagh, R., Heijmans, R.J.R.K., & Mayumi, K. T. (2019). 5 Can the social cost of carbon be calculated? Contemporary Climate Change Debates: A Student Primer, 65.

Policy Reports (in Dutch)

Van Damme, E.E.C., Gerlagh, R., Heijmans, R.J.R.K., & Willems, B.J. (2018). Veilen of vergelijken voor het winnen van windenergie op zee?

Policy report written on request of the Dutch Ministry of Agriculture, Nature and Food Quality regarding the question how the rights to build windmill parks on the North Sea are most efficiently allocated.

Academic talks

Conferences

SURED (Ascona, Switzerland); European Economic Association Annual Meeting (Berlin, Germany); Econometric Society World Congress (Milan, Italy); Conference of the Spanish-Portuguese Association of Resource and Environmental Economics (Lleida, Spain – moved to 2020); European Association of Environmental and Resource Economists Annual Meeting (Berlin, Germany); Koninklijke Vereniging voor Staatshuishoudkunde New Paper Session (Leiden, the Netherlands); Autumn panel meeting on the economics of climate change (Berling, Germany – organized by Economic Policy and CEPR)

European Economic Association Annual Meeting (Manchester, United Kingdom); European Association of Environmental and Resource Economists Annual Meeting (Manchester, UK); CREE Workshop (Statistics Norway, Oslo, Norway); UECE Lisbon Meetings in Game Theory and Applications (Lisbon, Portugal); International Energy Workshop (IEA, Paris, France); Energy & Climate Conference (Toulouse, France)

SURED (Ascona, Switzerland); World Meeting of Environmental and Resource Economists (Gothenburg, Sweden); European Economic Association Annual Meeting (Cologne, Germany); CREE Workshop (Statistics Norway, Osly, Norway); UECE Lisbon Meetings in Game Theory and Applications (Lisbon, Portugal); Nederlandse Economendag/Dutch Economists Day (Amsterdam, the Netherlands)

Seminars

2020	Tilburg University; Nova SBE Health Economics & Management Knowledge Center, Lisbon, Portugal; Universidad del Rosario, Bogota, Colombia
2019	Nederlandse Emissieautoriteit (Dutch emissions authority)

2017 Tilburg University; CPB Netherlands Bureau for Economic Policy Analysis

Awards

2015 Tilburg University Excellence Scholarship

Scholarship from the Spanish-Portuguese Association of Resource and Environmental Economics to present my job market paper at their conference.

Teaching Experience

Teaching Assistant, Tilburg University, the Netherlands

2019/20 BSc thesis supervision, Grondslagen macro-economie (undergraduate macro, in Dutch), Micro-economics 2: Game Theory (research master).

Teaching Assistant, Tilburg University, the Netherlands

2018/19 BSc thesis supervision, Grondslagen macro-economie (BSc macro, in Dutch), Economics for Social Sciences (BSc).

Teaching Assistant, Tilburg University, the Netherlands

2017/18 MSc thesis supervision, Grondslagen macro-economie (BSc macro, in Dutch), Macroeconomics for EOR (BSc).

Employment

2014 Intern, De Nederlandsche Bank, Amsterdam

Professional Activities

Refereeing: Resource and Energy Economics, Annals of Economics and Statistics

Conferences: Reviewer for the Spring Meeting of Young Economists (24th and 25th edition) Organizational: Member of the Education Committee, Tilburg University, 2015-2017

Skills

Computer: LATEX, Matlab, Python (beginner)

Languages: Dutch (native), English (fluent), German (intermediate), Portuguese (beginner).

References

Prof. Dr. Eric van Damme

Supervisor Tilburg University +31 13 466 30 45 Eric.vanDamme@tilburguniversity.edu

Prof. Dr. Sjak Smulders

Tilburg University +31 13 466 36 53 j.a.smulders@uvt.nl

Prof. Dr. Bård Harstad

University of Oslo +47 228 560 52 bard.harstad@econ.uio.no

Prof. Dr. Reyer Gerlagh

Supervisor Tilburg University +31 13 466 26 28 r.gerlagh@uvt.nl

Prof. Dr. Knut Einar Rosendahl

Norwegian University of Life Sciences +47 672 311 45 knut.einar.rosendahl@nmbu.no