#### Hassan BENCHEKROUN

Department of Economics, McGill University 855 Sherbrooke West, Montreal, QC, Canada. H3A-2T7. E-mail: hassan.benchekroun@mcgill.ca

Citizen of Canada and Morocco, Born in 08/28/1968.

#### CURRENT AND PAST POSITIONS

Professor: McGill University, since May 2015

Associate Professor (with tenure): McGill University, since June 2006.

Visiting Scholar: Tilburg University, September 2006-June 2007.

Assistant Professor (tenure track): McGill University, since July 2002.

Assistant Professor (tenure track): Florida Atlantic University, October 1999- June 2002.

Assistant Professor (limited term appointment): Concordia University, Jan. 98-May 99.

#### **EDUCATION**

Sep. 1993 - Apr. 1998: Ph.D. in Economics, Université Laval

Jan. 1993 - Aug. 1993: Graduate studies, department of mathematics, Université Laval.

Sep. 1989 - June 1992: Industrial Engineering, École Mohamedia des Ingénieurs, (Morocco).

Sep. 1987 - June 1989: Mathématiques supérieures et spéciales, Lycée Moulay Youssef, Rabat (Morocco).

## **EDITORIAL DUTIES**

Associate Editor of Journal of Economics Dynamics and Control (July 2021-).

Associate Editor of Dynamic Games and Applications (2010-).

Associate Editor of *Resource and Energy Economics* (2015-).

Associate Editor (2010-2013) and Co-Editor (2013-2017) of *Environmental and Resource Economics*. Official journal of the European Association of Environmental and Resource Economists.

Guest Editor with C. Seguin, *Actualité Economique*, special issue in memory of Pierre Lasserre (2019).

Guest Editor, with R. Amir and L. Lambertini, of the special issue 'Dynamic Games in Industrial Organization', *Dynamic Games and Applications* (2015).

Editorial Advisor for the Canadian Journal of Economics Editorial Board (2003-2006).

## PUBLICATIONS (authors listed in alphabetical order unless otherwise stated)

- 47) "OPEC, Unconventional Oil and Climate Change On the Importance of the Order of Extraction", with G. van der Meijden and C. Withagen, Journal of Environmental Economics and Management, vol. 104.
- 46) "On the impact of trade in a common property renewable resource oligopoly," with A. Ray Chaudhuri and D. Tasneem (2020), **Journal of Environmental Economics and Management**, vol. 101(C).
- 45) "An oligopoly-fringe non-renewable resource game in the presence of a renewable substitute" with G. van der Meijden and C. Withagen (2019), **Journal of Economic Dynamics and Control**, vol 105, pages 1-20.
- 44) "An Experimental Study of Sustainable Management of a Renewable Resource in Continuous Time", D. Tasneem, J. Engle-Warnick and HB (2019), Applied Economics, vol 51 (35), pages 3804-3833.
- 43) "On agreements in a nonrenewable resource market: a cooperative differential game approach", M. Berthod and HB (2019), **Journal of Economic Dynamics and Control**, 98(C), pages 23-39.
- 42) "Mergers in Nonrenewable Resource Oligopolies and Environmental Policies" with M. Breton, A. Ray Chaudhuri (2019), **European Economic Review**. 111, 35-52.
- 41) "Nurturing an Infant Industry by Markovian Subsidy Schemes" with N V. Long (2018), **Dynamic Games and Applications** 8 (3), 519-541.
- 40) "Anticipated International Environmental Agreements" with Ö. T. Açikgöz, (2017), **European Economic Review**, 92, 306–336.
- 39) "An experimental study of a common property renewable resource game in continuous time", D. Tasneem, J. Engle-Warnick and HB, (2017), Journal of Economic Behavior & Organization, 140, 91-119.
- 38) "Status concern and the exploitation of common pool renewable resources", with N. V. Long, (2016), *Ecological Economics*, 125, 70-82.
- 37) "The impact of foresight in a transboundary pollution game", with G Martín-Herrán, (2016), European Journal of Operational Research, 251 (1), 300-309.
- 36) "Self-regenerating environmental absorption efficiency and the soylent green scenario", F El Ouardighi, H B and D Grass, (2016), Annals of Operations Research, 238 (1-2), 179-198.

- 36) "Introduction to the Special Issue on Dynamic Games in Industrial Organization. ", with R. Amir and L. Lambertini, *Dynamic Games and Applications*, (2015), issue 4.
- 35) "Environmental R&D in the Presence of an Eco-Industry", Alain-Desire Nimubona and HB, Environmental Modeling and Assessment, October 2015, Volume 20, Issue 5, pp 491-507.
- 34) "On the effects of mergers on equilibrium outcomes in a common property renewable asset oligopoly" with G. Gaudet, (2015), **Journal of Economic Dynamics and control**, vol 52, p 209-223.
- 33) "Harvests' lifespan and North-South market share rivalry", with S. Benchekroun, (2015), International Review of Economics and Finance, vol 37, p: 114-124.
- 32) "Cleaner Technologies and the Stability of International Environmental Agreements" with A. Ray Chaudhuri, (2015), Journal of Public Economic Theory, vol 17 (6), p: 887–915.
- 31) "Some Effects of Asymmetries in a Common Pool Natural Resource Oligopoly", with G. Gaudet and H. Lohoues, (2014), Strategic Behavior and the Environment, vol 4 (3), p: 213-235.
- 30) "Transboundary Pollution and Clean Technologies" with Amrita Ray Chaudhuri, (2014), Resource and Energy Economics., vol 36 (2), p: 601-619
- 29) "Do increases in risk mitigate the tragedy of the commons? Flow versus stock pollutants", with N. V. Long, (2014), Strategic Behavior and the Environment, vol 4 (1), p:1-14.
- 28) "Controlling pollution and carbon absorption capacity", F. El Ouardighi, HB and Dieter Grass, (2014), Annals of Operations Research, vol 220, p: 111-133.
- 27) "Adaptation and the allocation of the cost of pollution reduction" with F. Taherkhani, (2014), **Dynamic Games and Applications**, vol. 4, pages: 32-57.
- 26) "On price taking behavior in a nonrenewable resource cartel-fringe game" with Cees Withagen, (2012) Games and Economic Behavior, vol. 76(2), pages 355-374.
- 25) "Collaborative Environmental Management: A Review of the Literature" with Ngo Van Long, (2012), International Game Theory Review, December 2012, Vol. 14, No. 04
- 24) "Welfare Effects of Mergers and Trade Liberalization", Amrita Ray Chaudhuri and HB, (2012), Review of International Economics, Vol. 20 (1), pages: 119–133.
- 23) "The Optimal Depletion of Exhaustible Resources: A Complete Characterization" with Cees Withagen, Resource and Energy Economics, 2011, vol. 33(3), pages 612-636.

- 22) "Free Trade, Autarky and the Sustainability of an International Environmental Agreement" with Murat Yildiz, (2011), **B. E. Journal of Economic Analysis & Policy**: Vol. 11 (1), Article 9.
- 21) "Environmental Policy and Stable Collusion: The Case of a Dynamic Polluting Oligopoly" with Amrita Ray Chaudhuri, Journal of Economic Dynamics and Control, 2011, Vol. 35 (4), April, pages 479-490
- 20) "When additional resource stocks reduce welfare", with Alex Halsema and Cees Withagen, the *Journal of Environmental Economics and Management*, 2010, vol. 59 (1), pages 109-114. Appendix in: http://www.econ.iastate.edu/jeem/supplement.htm.
- 19) "On nonrenewable resource oligopolies: the asymmetric case." with Alex Halsema and Cees Withagen, the *Journal of Economic Dynamics and Control*, 2009, vol. 33, issue 11, pages 1867-1879.
- 18) "Could Myopic Pricing be a Strategic Choice in Marketing Channels? A Game Theoretic Analysis", with Guiomar Martin-Herrán and Sihem Taboubi, the Journal of Economic Dynamics and Control, 2009, Vol. 33(9), Pages 1699-1718.
- 17) "North's technology improvement and South's welfare in the presence of FDI", with Sharmila Vishwasrao, Oxford Economic Papers, 2009, Vol. 61 (3), Pages: 603-622.
- 16) "A class of performance-based subsidy rules", co-author Ngo Van Long, the **Japanese** economic Review, 2008, vol. 59(4), pages 381-400.
- 15) "The build-up of cooperative behavior among non-cooperative selfish agents", coauthor Ngo Van Long, the *Journal of Economic Behavior and Organization*, (2008), vol. 67(1), Pages 239-252.
- 14)"Comparative dynamics in a productive asset oligopoly", the **Journal of Economic Theory**, 2008, vol. 138(1), pages 237-261.
- 13) "Tax differentials and environmental R&D strategic alliances", co-author Denis Claude, **B.E. Journals of Theoretical Economics**, 2007, vol. 7: Iss. 1, Article 26.
- 12) "A unifying differential game on the effect of promotions on goodwill", the *International Game Theory Review*, 2007, vol. 9, No: 2, pages: 183-197.
- 11)"Optimum tariffs and patent length in a model of North-South technology transfer", Sharmila Vishwasrao, Srabana Gupta and HB, the *International Review of Economics* and Finance, 2007, vol. 16 (1), pages 1-14.
- 10) "Trade liberalization and the profitability of mergers: a global analysis", co-author Amrita Ray Chaudhuri, the **Review of International Economics**, November 2006, vol.14 (5), pages: 941-957.

- 9) "Temporary natural resource cartels", co-authors G. Gaudet and N. V. Long, the Journal of Environmental Economics and Management, 2006, vol. 52(3), p. 663-674.
- 8) "The curse of windfall gains in a dynamic oligopoly" co-author Ngo Van Long, the Australian Economic Papers, 2006, vol. 45(2), pages 99-105.
- 7) "The closed-loop effect and the profitability of horizontal mergers", Canadian Journal of Economics. Aug. 2003 Vol. 36 (3) p 523-764.
- 6) "Unilateral production restrictions in a dynamic duopoly", **Journal of Economic Theory**. Aug. 2003 Vol. 111 (2), p. 214-239.
- 5) "On the profitability of production constraints in a dynamic natural resource oligopoly", co-author Gérard Gaudet. *Journal of Economic Dynamics and Control.* 2003. Vol. 27 (7). p 1237-52.
- 4) "Transboundary fishery: a differential game model", co-author Ngo Van Long. **Economica**, 69 (2002): 207-229.
- 3) "On the multiplicity of efficiency inducing tax rules", co-author Ngo Van Long. *Economics Letters*, 76 (2002): 331-336.
- 2) "Learning by doing and strategic trade policy", co-authors Ngo Van Long and Huilan Tian, Review of International Economics, v7 issue 3 August 1999, pp. 493-508.
- 1) "Efficiency inducing taxation for polluting oligopolists", co-author Ngo Van Long, **Journal of Public Economics**, v70 n2 Nov 1998, pp. 325-42.

#### ONGOING RESEARCH: UNDER REVIEW AND WORK IN PROGRESS

<sup>&</sup>quot;On the Profitability of Cross-ownership in Cournot Nonrenewable Resource Oligopolies: Stock Size Matters" with M. Dai and N.V. Long.

<sup>&</sup>quot;Implementation of the Lindahl correspondence via simple indirect mechanisms" with C. Figuieres and M. Tidball.

<sup>&</sup>quot;Cartel stability in a dynamic oligopoly with sticky prices", with L. Xue.

#### **BOOK CHAPTERS**

"Adaptation effectiveness and free-riding incentives in international environmental agreements" with A. Ray Chaudhuri and W. Marrouch, Chapter 11, in S. Cagatay, O. Kayalca and H. Mihci (eds.), Economics of International Environmental Agreements: A Critical Approach, Routledge U.K, 2017.

"On Common Property Resource Oligopolies", Chapter 2, The WSPC Reference on Natural Resources and Environmental Policy in the Era of Global Change, Volume 1, Game Theory. World Scientific Publishing. Editors Ana Espinola-Arredondo and Felix Munoz-Garcia, 2016.

"Clean Technologies, Climate Change Mitigation and IEAs", Chapter 11, with A. Ray Chaudhuri, The WSPC Reference on Natural Resources and Environmental Policy in the Era of Global Change, Volume 1, Game Theory. World Scientific Publishing. Editors Ana Espinola-Arredondo and Felix Munoz-Garcia, 2016.

"Game Theory and Environmental and Resource Economics", with N. V. Long in Manfred M. Fischer and P. Peter Nijkamp, *Handbook of Regional Science*, Springer 2013.

"Static and Dynamic Games in Environmental and Resource Economics", (with Ngo Van Long), (2011), in A. Batabayal and P. Peter Nijkamp (Eds.), Research Tools in Natural Resource and Environmental Economics, World Scientific Publishing.

"Capital resource substitution, overshooting, and sustainable development" co-authors N. V. Long and S. Katayama, in Optimal Control and Dynamic Games Applications in Finance, Management Science and Economics Series, Vol. 7, pages 41-65, Deissenberg, Christophe; Hartl, Richard F. (Eds.) 2005.

## **RESEARCH GRANTS**

Fond Québécois de la Recherche sur la Sociéte et la Culture (FQRSC) :

- Team Grant: 2017-2021; \$356 000. With: R. Cairns (McGill), J. Leroux (HEC), N. V. Long (McGill), C. Seguin (UQAM), E. Billette de Villemeur (UQAM and Lille).

Environnement et ressources naturelles en contexte dynamique et risqué : gestion, stratégies, politiques et institutions (2018-SE-206128)

- Team Grant: 2012-2016; \$444 928. With: R. Cairns (McGill), G. Gaudet (Université de Montreal), P. Lasserre (UQAM), J. Leroux (HEC) and N. V. Long (McGill).
- Team Grant: 2008-20012; \$426 700. With: With: R. Cairns (McGill), G. Gaudet (Université de Montreal), P. Lasserre (UQAM) and N. V. Long (McGill).
- Team Grant: 2004-2008; \$348 500. With: M. Breton (HEC), D. Vencatachelum (HEC) and G. Zaccour (HEC).
- Jeune Chercheur: 2003-2006; \$45 000.

The Canadian Social Science and Humanities Research Council (SSHRC):

- Insight Research Grant, 2019-2022; \$74 440 (with M. Herrmann, C. Constantatos).

On the dynamics of environmental consciousness and consumption habits

- Insight Research Grant, 2018-2023; \$135 441 (with F. Alvarez-Cuadrado and N.V. Long).

# Strategic and dynamic issues in the management of natural resources and the environment

- Insight Research Grant, 2017-2022; \$135 441 (with M. Breton, A. Ray Chaudhuri and N.V. Long).
- Canadian Environmental Issues, 2009-2012 (extended); \$249 458. With: Y. Dissou (University of Ottawa).
- Standard Research Grant, 2006-2009; \$90 000.
- Standard Research Grant, 2003-2006; \$69 001. The application was ranked 7/115.

#### GRADUATE STUDENTS' SUPERVISION

#### *PhD:* Advisor or co-advisor

Amrita Ray Chaudhuri, (completed 2008)

Taweewan Sidthidet (completed 2011)

Farnaz Taherkhani (completed 2013)

Dina Tasneem (completed 2015)

Fatemeh Behzadnejad (completed 2015)

Miao Dai (ongoing).

#### MA: Main advisor

Sherry Hsu (October 2003), Omer Acikgoz (October 2004), Li Hui (October 2004). Baffour Badu-Apraku (October 2005), Ksenya Gankina (October 2005), Rana El Halabieh (January 2006), Eric Madueno (April 2006), Paulina Chahine (October 2009), Benjamin Loper (October 2009), Itamar Megido (October 2009), Guillaume Lord (2011), Javad Samieenia (October 2016), Ogonna Anaekwe (October 2016), Tammy Ji (October 2018), Falguni Joshi (October 2018), Frederic Sfeir (October 2019), Bo Song (October 2019), Johanna Barnreuther (October 2021).

# Some Recent Service Activities

Member of the SSHRC Economics adjudication committee for the 2020-21 Insight Grants competition

Member of the FRQSC committee - Research Support for New Academics Grants for the 2020-2021 competition

Reviewer of the Economics Program, Qatar University, April 2021

Reviewer for FNR (Fonds de la Recherche National) Luxembourg, CORE program, June 2021

External committee member of HDR (Habilitation à diriger des recherches), Université Paris 1 Panthéon-Sorbonne, twice. January 2021