Curriculum Vitae: Thomas K.J. McDermott

CONTACT Discipline of Economics, Room 221, St. Anthony's,

phone: +353 91 49 4327

National University of Ireland Galway,

email: thomas.mcdermott@nuigalway.ie

Galway, Ireland.

web: https://thomaskjmcdermott.wordpress.com/

RESEARCH STATEMENT My research interests are at the intersection of climate change and development economics, with a focus on empirical evaluation of the economic impacts of extreme weather events, such as floods, and on issues of public policy related to the economics of adaptation to climate change. I am a globally recognised expert in the economics of climate change and development. I have published widely in top international academic journals, as well as books, book chapters, and policy reports.

CURRENT APPOINTMENT **NUI Galway**

April 2020-present

Galway University Foundation Lecturer in the Economics of Climate Change and Development, Discipline of Economics, J.E. Cairnes School of Business and Economics, National University of Ireland Galway.

OTHER AFFILIATIONS Director MSc. Global Environmental Economics, NUI Galway.

Founding member Centre for Economic Research on Inclusivity and Sustainability (CERIS), NUI Galway.

Member of the Socio-Economic Marine Research Unit (SEMRU), Whitaker Institute, NUI Galway.

London School of Economics

Jan 2015-present

Visiting Fellow, Grantham Research Institute on Climate Change and the Environment, LSE.

Previous Appointments NUI Galway Lecturer, Discipline of Economics, Sept 2019–April 2020

NUI Galway Government of Ireland Research Fellow, Whitaker Institute, Oct 2017–Sept 2019

UCC Senior Post-Doc, Environmental Research Institute, UCC, Jan 2017–July 2017

UCC Lecturer, School of Economics, UCC, Jan 2015–Dec 2016

LSE Post-doc, promoted to Research Officer, Grantham Research Inst., LSE, Sept 2012–Dec 2014

DCU Lecturer, DCU Business School, 2008-2009 (full-time) & 2010-2011 (part-time)

DKM Economic Consultant, DKM, Dublin, Ireland, Sept 2007–Sept 2008

EDUCATION

Trinity College Dublin PhD (2013) Essays on Environmental Shocks and Economic Development.

NUI Galway MEconSc. (2007), 1st class hons. Graduated top of class, with highest grades ever awarded for the programme.

NUI Galway B.Comm. (2006) majoring in Economics, minor in Italian. 1st class hons. Included a year on Erasmus in Italy.

Funding Awards

Funding Summary: 10 awards as PI (or individual funding for own proposals) to the value of €300K, and a further 3 awards as named or funded researcher, to the value of €9.5M.

As Principle Investigator or individual funding for own proposals:

- 2019 School of Business and Economics, NUI Galway, seed funding €3K, 2 years.
- 2018 Enterprise Ireland Proposal Preparation Support award, value €13,200, 1 year.
- 2017 Government of Ireland Postdoctoral Research Fellowship, value €90K, 2 years.
- 2017 Interview (second stage) for ERC Starter Grant 2017 (not funded).
- 2017 Enterprise Ireland Proposal Preparation Support award, value €3,000, 9 months.
- 2017 Environmental Protection Agency (EPA) study on "The economics of climate change impacts and adaptation", value €6,300, 6 months.
- 2015 EPA award for "Adaptive Responses to Climate Impacts (ARC)" in partnership with LSE, value €120K, 18 months.
- 2015 EPA study on "The costs of climate impacts and adaptation for Ireland", value €6,300, 6 months.
- 2015 UCC Strategic Research Fund Award, value €1,000, 1 year.
- 2012 IRCHSS Government of Ireland Scholarship (not undertaken).

As Named or Funded Researcher:

- 2016 EPA award to UCC: National Risk Assessment of Impacts of Climate Change, value €300K, 2 years.
- 2015 EPA award to UCC: Large Urban Area Adaptation, value €200K, 2 years.
- 2014 IDRC and DFID award: Pathways to Resilience in Semi-Arid Economies (PRISE), 5 year consortium research project, led by LSE, value €9M.

OTHER HONOURS AND AWARDS

- NUI Galway President's Award for Research Excellence, 2020.
- NUI Galway SBE research incentivisation scheme.
- UNU-WIDER PhD Internship, 2012.
- Ussher Fellowship 2009-2012, Trinity College Dublin (value €48K plus course fees).
- Labhrás Ó Nualláin Prize 2005-2006, awarded by NUI Galway for results obtained in the study of Development Economics.
- Scholarship from NUI Galway 2005, in acknowledgement of outstanding academic achievement.
- The President's Award (GAISCE bronze medal) 2000.
- Profiled as one of 50 successful graduates from the B Comm degree at NUI Galway, in a special publication to mark the centenary of the programme in 2016.

Publications Summary

13 peer-reviewed journal articles, 1 edited book, 8 book chapters/reports, all as first or senior author (equal contributions), all but one independent of PhD supervisors; including 1xABS4, 5xABS3, and 2xQ1 at scimagojr.com. >1800 citations, h-index 11, i10-index 14 (Google Scholar, 18/06/2021).

Work in Progress and Working Papers:

- "Cities and the Sea Level" with Yatang Lin (Hong Kong University of Science and Technology) and Guy Michaels (LSE) Under review at the *Journal of Political Economy*
- "Climate, displacement and conflict: The effects of floods on urban social disorder", with David Castells-Quintana (UAB) and Maria del Pilar Lopez-Uribe (Los Andes, Bogota) Under review at the *Journal of Development Economics*
- "Information matters: Evidence from flood risk in the Irish housing market", with Tom Gillespie (NUI Galway) and Ronan Lyons (TCD)
- "Green Investment and Firm Competitiveness: A Test of Porter's Hypothesis" with Ellen O'Connor, Bernadette Power, Celine McInerney and Paul Deane (all UCC). Best Paper award at the Irish Academy of Management Conference 2018, in the CSR, Business Ethics and Sustainability Track.

Published Peer Reviewed Journal Articles:

- Doherty, E., T.K.J. McDermott, S. Mellet, D. Norton, D. O'Hora, M. Ryan (2021). "A discrete choice experiment exploring farmer preferences for insurance against extreme weather events", *Journal of Environmental Management*, 290(2021) 112607.
- Castells-Quintana, D., M. Krause, and T.K.J. McDermott (2021). "The urbanising force of global warming: The role of climate change in the spatial distribution of population", forthcoming at the *Journal of Economic Geography*.
- Kocornik-Mina, A., T.K.J. McDermott, G. Michaels and F. Rauch (2020). "Flooded Cities", American Economic Journal: Applied Economics, 12(2): 35-66.
- Kilgarriff, Paul, Thomas K.J. McDermott, Amaya Vega, Karyn Morrissey and Cathal O'Donoghue (2018) "The indirect economic costs of flooding: Evidence from transport disruptions during Storm Desmond". *Journal of Environmental Economics and Policy*. Published online: August 2018. DOI: 10.1080/21606544.2018.1502098.
- McDermott, T.K.J. and S. Surminski (2018) "How normative interpretations of climate risk assessment affect local decision-making: an exploratory study at the city scale in Cork, Ireland",
 Philosophical Transactions of the Royal Society A 2018 376 20170300; DOI: 10.1098/rsta.2017.0300.
- Castells-Quintana, David, Maria del Pilar Lopez-Uribe, and Thomas K.J. McDermott (2018)
 "Adaptation to climate change: A review through a development economics lens", World Development 104 April 2018: 183-196.
- Castells-Quintana, D., M.D. Lopez-Uribe and T.K.J. McDermott (2017) "Geography, institutions and development: A review of the long-run impacts of climate change", *Climate and Development* 9(5): 452-470. DOI: 10.1080/17565529.2016.1167665
- Millner, A. and T.K.J. McDermott (2016) "On model confirmation in climate economics", *Proceedings of the National Academy of Sciences of the United States of America*, 113(31):8675-8680. doi: 10.1073/pnas.1604121113.
- Baur, D.G. and T.K.J. McDermott (2016) "Why is Gold a Safe Haven?" Journal of Behavioral and Experimental Finance, 10:63-71. DOI: 10.1016/j.jbef.2016.03.002
- Fankhauser, S. and T.K.J. McDermott (2014). "Understanding the Adaptation Deficit: Why are Poor Countries More Vulnerable to Climate Events than Rich Countries?" *Global Environmental Change* 27:9-18.
- McDermott, T.K.J., F. Barry and R.S.J. Tol (2014). "Disasters and Development: Natural Disasters, Credit Constraints and Economic Growth". Oxford Economic Papers 66(3):750-773.
- McDermott, T.K.J. (2011). "On Natural Disasters and Economic Development". Trinity College Dublin Journal of Postgraduate Research 10:54-66 [pdf].
- Baur, D.G. and T.K. McDermott (2010). "Is Gold a Safe Haven? International Evidence". Journal of Banking and Finance, 34(8):1886-98.

Books:

• The Economics of Climate Resilient Development, co-edited with Sam Fankhauser. Edward Elgar (July 2016).

Endorsements:

- This book brings much-needed nuance and evidence to the complicated relationship between vulnerability and climate change A must-read for all interested in climate and development. Prof Richard Tol (U. Sussex)
- This volume makes a valuable contribution to the literature [and] also provides timely guidance to policy practitioners on how to make climate resilient development a reality. Dr Shardul Agrawala (Head of the Environment and Economy Integration Division at the OECD Environment Directorate)
- An extremely timely book it should be read not only by students of development and planning but also by practitioners, in both the public and private sectors, whose development choices will affect

future vulnerabilities to climate change. – Dame Prof Judith Rees (London School of Economics)

Book Chapters, Reports & Policy Briefs:

- "Adaptive Responses to Climate Impacts (ARC): Costing the Impacts of Climate Change on the Irish Economy and Assessing the Options for Adaptation", EPA Research Report No.301, November 2019 (with Justin Doran, Paul Kilgarriff, Swenja Surminski and Mauricio Perez Alaniz).
- "Strengthening Disaster Resilience", ADB thematic chapter, Asian Development Outlook Report, April 2019 (with Benno Ferrarini and Ilan Noy). - Featured in NY Times, Xinhua, Financial
- "EU-ETS and Competitiveness of Irish Industry", EPA Research Report No.276, May 2019 (with Celine McInerney, Ellen O'Connor, Bernadette Power, and Paul Deane).
- "Translating flood risk assessment into local urban action", Whitaker Policy Brief No.39 (July 2018).
- "Climate resilient development: An introduction" (with Sam Fankhauser) in The economics of climate resilient development (Fankhauser and McDermott, eds). Edward Elgar (2016).
- "The role of climate in development" (with David Castells-Quintana and Maria Lopez-Uribe) in The Economics of Climate Resilient Development (Fankhauser and McDermott, eds). Edward Elgar (2016).
- "Coping with climate risk: The options" (with David Castells-Quintana and Maria Lopez-Uribe) in The Economics of Climate Resilient Development (Fankhauser and McDermott, eds). Edward Elgar (2016).
- McDermott, T.K.J. "Investing in Disaster Risk Management in an Uncertain Climate", in Surminski, S. and T. Tanner (eds) Realising the Triple Resilience Dividend: A New Business Case for Disaster Risk Management, Springer (2016). Also published as World Bank Policy Research Working Paper No. WPS7631

POPULAR WRITING

- MEDIA AND OTHER I have written a number of popular science articles based on my research, published in e.g. LSE Business Review, CentrePiece (The Magazine of the Centre for Economic Performance, LSE - cover article for Vol.20(3), Winter 2015/16), VoxEU.org, IGC blog, TheConversation.com, VoxDev, Inshore Ireland magazine, LSE Review of Books, Willis Resilience Expedition - Exploring Extremes (invited chapter on Economic Impacts of Natural Disasters - Lessons from Recent Experience), IrishEconomy.ie blog, Social Europe Journal, Financial Times (letter on climate policy, Dec 2010).
 - Invited to contribute to RTE Brainstorm; two pieces on flood risk, planning and housing policy published (2019 and 2020).
 - I have discussed my research on national radio shows in Ireland, e.g. Drivetime RTE (230K listeners) and Newstalk Lunchtime (80K listeners), and on Irish national TV news (Nuacht RTE and TG4).
 - My research has been featured in the Financial Times, Bloomberg Business, NY Times, Xinhua, Irish Independent, Irish Examiner, Inshore Ireland.

Leadership & Research SUPERVISION

- Co-supervisor for NUI Galway PhD student Tom Gillespie (completed in 2021).
- Previously supervised 1 RA at NUI Galway, 1 post-doc, 2 RA, and 2 MSc at UCC, 4 MSc and 4 RAs at LSE.
- Joint publication with post-doc at UCC (Paul Kilgarriff) at Journal of Environmental Economics and Policy; one of his PhD chapters.
- One of my MSc students at LSE Christina Gkouvali won the prize for best MSc Environment and Development thesis (2013) for "Does the narrative on climate change affect humanitarian donations to natural disasters".
- Project lead for ADB research project on Disasters and Development in Asia: Involved commissioning and managing/editing a set of background papers from leading international scholars, and shaping the overall themes and narrative for the final report, for which I was lead author,

published as part of the Bank's flagship annual Asian Development Outlook report in April 2019.

- Principal Investigator for a research project on "Adaptive responses to climate impacts", funded by the Irish EPA.
- Project manager for initial (12 month) phase of a large consortium research project on climateresilient development, Pathways to Resilience in Semi-arid Economies (PRISE), based at LSE and with partner organisations in Pakistan, Senegal and Tanzania: Responsible for interviewing, hiring and supervising a team of 4 research assistants.

RESEARCH PRESENTATIONS

Invited speaker:

- Universita Autonoma Barcelona (UAB), Spain (upcoming, 2021)
- Christian Michelsen Institute, Norway (2020)
- Whitaker Institute Research Seminar (2019)
- Asian Development Bank theme chapter workshop (Manila, Jan 2019)
- Asian Development Bank workshop on Disasters and Development in Asia (Manila, Dec 2018)
- SEMRU Research Symposium (2018)
- UNU-WIDER Development Conference Think Development Think WIDER (2018 invited poster presentation)
- NUI Galway Economics seminar (2018)
- Environmetrics Workshop, Marine Institute (2018)
- Government of Ireland Climate Change Sectoral Adaptation Committee (2017)
- Government of Ireland Climate Change Sectoral Adaptation Committee (2016)
- UCC Climate Change Research Workshop (2015)
- NUI Galway Economics Departmental seminar (2014)
- Grantham Research Institute Workshop on Adaptation, Green Growth and Urbanization (2014)
- Centre for Economic Development and Institutions, Brunel University London (2013)

Selected other conferences: Irish Economic Association (2011, 2013, 2015, 2019), Regional Science Association (Cork 2018), EAERE (2011, 2015), Regional Science British & Irish section (2015), CSAE Oxford (2012), SURED (2012), Belpasso International Summer School on Environmental and Resource Economics (2011).

Teaching

I have over 10 years of teaching experience at undergraduate and post-graduate levels – including modules in the economics of climate change, development economics, and econometrics; having previously held full time lecturing positions at DCU (2008-09) and UCC (2015-16) and currently at NUI Galway.

Courses Taught:

2019-20 EC5118 Climate Change Economics, MGEE masters programme, NUI Galway

2019-20 EC423 Ireland in the Global Economy, final year B.Comm, NUI Galway

2019-20 EC357 Development Economics, final year undergraduate, NUI Galway

2019-20 EC141 Principles of Macroeconomics, first year B.Comm, NUI Galway

2018-19 EC5118 Climate Change Economics, MGEE masters programme, NUI Galway

2018-19 EC357 Development Economics, final year undergraduate, NUI Galway

- **2016-17** EC3140 The Wealth and Poverty of Nations: Economic Growth and Development, final year undergraduate, UCC
- 2016-17 EC6061 Scenario Analysis for Creative Thinking, MA Economics, UCC
- 2016-17 EC6623 Analysing General Business Conditions, MSc (Business Economics), UCC
- **2015-16** EC3156 Environmental Economics: The Problem of Climate Change, final year undergraduate, UCC
- **2015-16** EC3140 The Wealth and Poverty of Nations: Economic Growth and Development, final year undergraduate, UCC
- 2015-16 EC2206 Business Econometrics and Forecasting, undergraduate, UCC
- 2015-16 EC6061 Scenario Analysis for Creative Thinking, MA Economics, UCC
- 2015-16 EC6623 Analysing General Business Conditions, MSc (Business Economics), UCC
- 2015-16 EC6053 Research Methods, MA Economics, UCC
- 2015-16 EC6617 Professional Business Skills, MSc (Business Economics), UCC
- 2014-15 EC2206 Business Econometrics and Forecasting, undergraduate, UCC
- 2014-15 EC6617 Professional Business Skills, MSc (Business Economics), UCC
- 2014-15 EC6053 Research Methods, MA Economics, UCC
- 2014-15 EC6044 Quantitative Techniques and Analysis, MBS Food Marketing, UCC
- 2013-14 GY427 Climate Change: Science, Economics and Policy Seminar, LSE
- 2012-13 GY427 Climate Change: Science, Economics and Policy Seminar, LSE
- 2010-11 Growth and Development, final year undergraduate, DCU Business School, DCU
- 2008-09 Growth and Development, final year undergraduate, DCU Business School, DCU
- 2008-09 History of Economic Thought, final year undergraduate, DCU Business School, DCU
- 2008-09 Irish Economy, final year undergraduate, DCU Business School, DCU
- 2008-09 Introduction to Macroeconomics, first year undergraduate, DCU Business School, DCU
- 2008-09 Introduction to Economic Analysis, postgraduate (for students with little or no previous economics), DCU Business School, DCU
- 2008-09 International Trade, second year undergraduate, DCU Business School, DCU
- 2006-07 Undergraduate tutorials, Economics, NUI Galway

COMMUNITY CONTRIBUTIONS

Committees:

- Athena Swan Self Assessment Team (SAT), School of Business and Economics, NUI Galway
- Exams Committee, Discipline of Economics, NUI Galway
- Programme Board for Masters in Global Environmental Economics, NUI Galway
- Graduate Research Committee (GRC) chair for one PhD student, member for another, both at NUI Galway.

Guest Lectures:

- Guest lecture on my research paper "Flooded Cities", for first year economics students at NUI Galway, 22 Oct 2019
- Guest lecture on Climate Change Economics for BA Social and Public Policy (final year) students, NUI Galway, 15 March 2019
- Careers in Economics evening, invited speaker, NUI Galway, 4 February 2019

- Guest lecture on Climate Change Economics to BA Social and Public Policy (final year) students, NUIG, 9 March 2018
- Guest lecture on Climate Change Economics to NREP masters students, NUIG, 7 March 2018
- Career talk to final year BComm students at NUI Galway, 18 Sept 2017

Reviewing & Examining:

- Journals: World Development (Certificate for Outstanding Contribution in Reviewing, 2018), Journal of Development Economics, Environment and Development, Sustainability, Global Environmental Change, the Journal of Banking and Finance and the Geneva Papers on Risk.
- Expert review of ESRC proposal on "Meeting the Sustainable Development Goals through investment in resilience" (application to UK's Global Challenges Research Fund, 2019)
- 12 background papers for ADB report on disasters and development in Asia (2018/19)
- Book chapter: "Global Tropical Cyclone Damages", for Springer (2018)
- External PhD examiner, for thesis on "Economic Impacts of Natural Disasters", Department of Economics, University of Sussex, 2017
- Expert review for book proposal, Handbook on Climate Economics, (Elsevier, 2017)
- Expert panel to review State of Knowledge on Climate Change in Ireland, 2015

Professional Development

Selected Recent Training

- Workshop on machine learning and economics (as part of the IPECE conference), NUI Galway, June 2019
- Workshop on introduction to R statistical software, Discipline of Economics, NUI Galway, May 2019
- Staff Health and Safety Briefing, NUI Galway, April 2019
- Structural Equation Modelling workshop, Whitaker Institute, NUI Galway, December 2018
- ERC Starter Grant proposal writing workshop, Amsterdam, June 2018
- Online security training, NUI Galway, March 2018
- Whitaker Institute workshop on "Getting a funding proposal over the line", February 2018
- Geographic Information Systems two-day course, Ryan Institute, NUI Galway, 12-13 October 2017
- ERC Starter Grant interview training workshop with Yellow Research, Amsterdam, May 2017

SOFTWARE EXPERTISE

Stata (advanced), ArcGIS and QGIS (advanced), LaTeX (advanced), Microsoft Office (advanced), Python (beginner), iMacros (web-scraping software - intermediate), NetLogo (agent-based modelling - beginner), R (beginner).

Languages

English (native speaker: excellent technical communication skills and ability to communicate and interpret research for diverse audiences), fluent Italian (to degree level), fluent Irish and competent French (A1 in both Irish and French at honours level in the Leaving Certificate Irish State exam).

Major Collaborators and Professional Network

- Guy Michaels, LSE
- Ferdinand Rauch, Oxford
- Yatang Lin, Hong Kong University of Science and Technology
- David Castells-Quintana, Universidad Autonoma Barcelona
- Maria del Pilar Lopez-Uribe, Universidad de los Andes (Colombia) and LSE
- Melanie Krause, Hamburg
- Tom Gillespie, NUI Galway
- Ronan Lyons, TCD
- Antony Millner, UC Santa Barbara
- Sam Fankhauser, LSE
- Ilan Noy, Victoria University, Wellington (NZ)
- Benno Ferrarini, Asian Development Bank
- Frank Barry, TCD
- Richard Tol, Sussex
- Adriana Kocornik-Mina, Alterra-Wageningen UR, Netherlands
- Swenja Surminski, LSE
- Maria Waldinger, LSE
- Dirk Baur, University of Western Australia
- Justin Doran, UCC
- Paul Kilgarriff, Luxembourg Institute of Socio-Economic Research (LISER)
- Ellen O'Connor, UCC
- Bernadette Power, UCC
- Celine McInerney, UCC
- Paul Deane, UCC
- Edel Doherty, NUI Galway
- Sinead Mellet, NUI Galway
- Danny Norton, NUI Galway
- Denis O'Hora, NUI Galway
- Mary Ryan, Teagasc
- Amaya Vega, GMIT
- Karyn Morrissey, University of Exeter
- Cathal O'Donoghue, NUI Galway
- John Cullinan, NUI Galway

Referees

- Referee details supplied on request.