Dr. Michela Faccioli

Research and Impact Fellow in environmental economics

Land, Environment, Economics and Policy (LEEP) Institute, University of Exeter

RESEARCH INTERESTS

Primary: economic valuation of non-market (mostly environmental) goods and services.

Secondary: natural capital accounting; mechanism design to incentivise changes in farmers'/landowners' behaviour.

NON-MARKET VALUATION OF THE ENVIRONMENT	NATURAL CAPITAL ACCOUNTING	MECHANISM DESIGN
Cost/benefit & welfare analysis Discrete Choice Experiments	Natural capital accounting principles and methods Non-market valuation	Reverse auctions Lab experiments
Choice modelling & econometrics Survey design	Integrating ecology into economic thinking Spatial analysis/GIS	Agro-environmental schemes
Other Stated Preference methods Other Revealed Preference methods	Landscape-scale natural capital accounts (NCAs) NCAs for water companies	
Behavioural & Experimental approaches		
Climate Change Risk & Uncertainty		
Long Term Horizons and discounting Food, health and the environment		

EMPLOYMENT HISTORY

2018 - present

Research and Impact Fellow in environmental economics

The University of Exeter

Land, Environment, Economics and Policy (LEEP) Institute

Research areas: economic valuation of the environment, discrete choice experiments, social and farmers' preferences, natural capital accounting, climate change, spatial analysis, mechanism design.

Main projects:

- ENSURE (Environmental Sustainability and Resilience) project on Global Food Security, Climate Change and Resilience (temporary P.I. & Co-I.)
- South West Partnership for Environmental and Economic Prosperity (SWEEP)
 - Natural Capital Accounting for National Parks (Dartmoor and Exmoor) (Co-I.)
 - Natural Capital Accounting for water companies (South West Water) (Co-I.)
 - Design of mechanisms to incentivise farmers to adopt more sustainable agricultural practices (Co-I.)
 - Recreation Futures for the Marine Environment (Co-I.)
- Forestry Commission project on the social values of woodlands in the UK (Co-I.)

As part of my role, I co-design my research with policy-makers, businesses and organisations

to make sure it creates impact on the ground and it can be used to take better environmental decisions that benefit society. For example, the SWEEP Natural Capital Accounting work in collaboration with South West Water has contributed to secure multi-million funding that the company will invest in the implementation of water interventions that will provide substantial environmental and social benefits over the period 2020-2045.

2015 – 2017 2018 - present

Post-doctoral researcher in environmental economics Honorary Research Associate

The James Hutton Institute Social, Economic and Geographical Sciences (SEGS) Group

Main projects

- EU-H2020 PROVIDE project, exploring mechanisms for a smart delivery of public goods from agriculture and forestry in the EU (Co-I.).
- Scottish Government Rural Affairs and Environment Strategic Research Programme (RESAS) 2016-2021
 - Natural Asset Register and Natural Capital Accounts (Hutton P.I. and project Co-I.)
 - Soil Management (Monetary valuation of Ecosystem Services from Peatlands) (temporary project P.I. and Co-I.)
 - CxC project on cost-effectiveness of peatland restoration (Co-I.)

2010 - 2011

Pre-doctoral researcher in environmental economics

University of the Balearic Islands Department of Applied Economics

Research areas: economic valuation of the environment, discrete choice experiments, social preferences, climate change, uncertainty, time persistence

Main project: Climate change effects on tourism demand. Empirical evidence and adaptation measures

EDUCATION & QUALIFICATIONS

2011 - 2015

PhD in Applied Economics

University of the Balearic Islands (Spain) Department of Applied Economics

- Thesis title: "Challenges in economic valuation of wetland protection under climate change impacts"
- Supervisors: A. Riera and C. Torres (University of the Balearic Islands)
- PhD evaluation committee: S. Navrud (Norwegian University of Life Sciences), M. Loureiro (University of Santiago de Compostela) and K. Glenk (Scotland's Rural College)
- Honours: "Matricula de honor" (highest honours in Spain)
- Doctoral degree with International Mention
- Visiting research stay at the Department of Geography and Sustainable Development at the University of St. Andrews (Scotland, UK) – supervisor: Prof. N. Hanley. Period: August – December 2014

2009 - 2010

Master in Tourism and Environmental Economics

University of the Balearic Islands (Spain)
Department of Applied Economics

- Dissertation title: "Young residents' perceptions and attitudes towards tourism impacts and policies: a case study of Folgaria (Italy)".
- Average grade: 9.33/10

2006 - 2009

Bachelor (Laurea Breve) in Economics and Management Sciences - Major in Tourism Management

Free University of Bolzano (Italy)
Faculty of Economics and Management

- Dissertation title: "Residents' perceptions and attitudes towards tourism impacts: a case study of the small rural community of Folgaria (Italy)".
- Grade: 110 cum laude/110 cum laude (highest honours in Italy)

PUBLICATIONS

Peer-reviewed publications

- Roberts, M., Byg, A., Faccioli, M., Novo, P., Kayle, C. (forthcoming). Stakeholder perceptions of public good provision from agriculture and implications for governance mechanism design. *Journal of Environmental Planning and Management* https://doi.org/10.1080/09640568.2020.1763274
- McVittie, A. and Faccioli, M. (2020). Biodiversity and ecosystem services net gain assessment: a comparison of metrics. Ecosystem Services 44(August 2020): 1-13. https://doi.org/10.1016/j.ecoser.2020.101145
- Faccioli, M., Czajkowski, M., Glenk, K., Martin-Ortega, J. (2020) Environmental attitudes and place identity as determinants of preferences for ecosystem services. *Ecological Economics* 174(August 2020): 1-19 https://doi.org/10.1016/j.ecolecon.2020.106600.
- Tinch, R., Beamont, N., Sunderland, T., Ozdemiroglu, E., Barton, D., Bowe, C., Börger, T., Burgess, P., Cooper, N., Faccioli, M., Failler, P., Gkolemi, I., Kumar, R., Longo, A., Mcvittie, A., Morris, J., Park, J., Ravenscroft, N., Schaafsma, M., Vause, J., Ziv, G (2019). Economic valuation of ecosystem goods and services: a review for decision makers. *Journal of Environmental Economics and Policy*, 8(4): 359-378.
- Faccioli, M.; Kuhfuss, L.; Czajkowski, M., (2019) Stated preferences for Conservation Policies under Uncertainty: Insights on the Effect of Individuals' Risk Attitudes in the Environmental Domain, *Environmental and Resource Economics*, 73(2): 627-659.
- Torres, C.; Faccioli, M.; Riera, A., (2017). Waiting or acting now? The effects on willingness-to-pay of delivering inherent uncertainty information in choice experiments, *Ecological Economics* 131: 231-240.
- Faccioli, M.; Hanley, N.; Torres, C.; Riera, A., (2016). Do we care about sustainability? An analysis of time sensitivity of social preferences under environmental time-persistent effects. *Journal of Environmental Management, 177, 356-364.*
- Faccioli, M.; Riera, A.; Torres, C., (2015). Valuing the recreational benefits of wetland adaptation to climate change: a trade-off between species' abundance and diversity. *Environmental Management*, *55*, *550-563*.
- Brida, J.G.; Osti, L.; Faccioli, M., (2011) Residents' perception and attitudes towards tourism
 impacts: a case study of the small rural community of Folgaria (Trentino Italy).
 Benchmarking: An International Journal, 18, 359-385.
- Faccioli, M., (2011) Youth's perception of tourism impact: policy implications for Folgaria (Italy). *International Journal of Tourism Policy*, 4, 1-35.

Papers submitted and under revision

• Faccioli, M. and Glenk, K., More in good condition or less in bad condition? Valence-based framing effects in the valuation of ecosystems' restoration.

Pre-submitted version: Conference paper presented at the 24th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Manchester, 26-29 June 2019) available at:

http://www.fleximeets.com/eaere2019/?p=programme

Papers close to submission

• Faccioli, M., Zonneveld, S., Tyler, C., Day, B. Local Natural Capital Accounting: does it deliver useful management information? A case study of Dartmoor and Exmoor National Parks

Previous version: Conference paper presented at the 25th Annual Conference of the European Association of Environmental and Resource Economists, 23 June – 03 July 2020. Available from:

http://www.fleximeets.com/eaere2020/?p=programme

 Glenk, K., Meyerhoff, J., Colombo, S., Faccioli, M. Are Willingness to Pay Estimates Derived from Discrete Choice Experiments Plausible? An Investigation of Overshooting Using a Simple Criterion.

Previous version: Conference paper presented at the 6th World Congress of Environmental and Resource Economist, Gothenborg, 25-29 June 2018. Available at: http://fleximeets.com/wcere2018/?p=programme

 Glenk, K., Faccioli, M., Martin-Ortega, J., Schulze, C., Potts, J. The opportunity cost of delaying climate action – peatland restoration under consideration of long-term effects of climate change.

Previous version (technical report): Glenk, K., **Faccioli, M.**, Martin-Ortega, J. (2018). Report on findings from a survey on public preferences for peatlands restoration: timing and long term resilience of peatlands under climate change. Report available at: https://environment.leeds.ac.uk/see-research/dir-record/research-projects/1104/peatlands-and-the-public

Papers in preparation

- Comparing different approaches to net environmental gain (with Mancini, M., Owen, N., Zonneveld, S., Bateman, I.)
- Contrasting three common approaches to decision-making about the environment (with Bateman, I., Binner, A. et al.)
- The economic value of forest recreation: a combined travel cost-discrete choice experiment study across different EU countries (Giergiczny, M., Czajkowski, M., Meyerhoff, J., Jacobsen, J.B., Abildtrup, J., Faccioli, M., Getzner, M., Glenk, K., Lundhede, T., Mayer, M., McVittie, A., Olschewski, R., Ščasný, M., Strange, N., Taye, F., T. Gajderowicz)
- The effect of different elicitation methods on preferences in discrete choice experiments (with K. Glenk)

Book chapters

Bateman, I.J., Binner, A., Day, B.H., Faccioli, M., Fezzi, C., Rusby, A., and Smith, G. (2020).
 The natural capital approach to integrating science, economics and policy into decisions affecting the natural environment, in Sutherland, W.J., Brotherton, P.N.M., Davies, Z.G., Ockendon, N., Pettorelli, N., and Vickery, J. (Eds.) Conservation Research, Policy and Practice, Cambridge University Press, Cambridge, pp. 198-217.

Technical / Project Reports

- Faccioli, M. and Bateman, I.J. (2019). Updating the Woodland Valuation Tool: a review of recent literature on the non-market values of woodlands. Report to the Forestry Commission, Ref No.: CFSTEN 2/14 and CFS 8/17, Land, Environment, Economics and Policy Institute (LEEP), University of Exeter Business School
- Binner, A., Smith, G., Faccioli, M., Bateman, I.J., Day, B.H., Agarwala, M., Harwood, A. (2018). Valuing the social and environmental contribution of woodlands and trees in England, Scotland and Wales Second edition: to 2018, Report to the Forestry Commission, Ref No.: CFSTEN 2/14 and CFS 8/17, Land, Environment, Economics and Policy Institute (LEEP), University of Exeter Business School

- Glenk, K., Faccioli, M., Martin-Ortega, J. (2018). Report on findings from a survey on public
 preferences for peatlands restoration: timing and long term resilience of peatlands under
 climate change. Report for the Scottish Government, available at:
 https://environment.leeds.ac.uk/see-research/dir-record/research-projects/1104/peatlands-and-the-public
- Artz, R.E., Faccioli, M., Roberts, M., Anderson, R (2018). Peatland restoration a comparative analysis of the costs and merits of different restoration methods. CxC report available at: https://www.climatexchange.org.uk/research/projects/peatland-restoration-methods-an-analysis-of-cost-effectiveness/
- Kleeschulte, S., Carrao, H., Gregor, M., Loehnertz, M., Ayanu, Y., Kleeschulte, I., Fons, J., Ubach, R., Milego, R., Weber, R., Nilsson, K., Turunen, E., Nordregio, S., Irvine, K.N., Maxwell, J., Kuhfuss, L., Faccioli, M., Blanco, G.G., Garcia, I. (2018) GRETA Green infrastructure: Enhancing biodiversity and ecosysTem services for territorial development, Inception Report, Version 05/02/2018, ESPON 2020 Cooperation Programme, 37pp.
- McVittie, A., Donnelly, D., Faccioli, M, MacLeod, C., Ibiyemi, A., Glenk, K., Blackstock, K. (2017) Summary of reviews of Natural Assets Registers and Natural Capital Accounting, RESAS 1.4.1 Briefing document for ELPEG April 2017, 4pp. Report for the Scottish Government available at: http://www.hutton.ac.uk/research/srp2016-21/wp141-natural-asset-inventory-and-accounts
- Faccioli, M., Blackstock, K. (2017). Review of UK Natural Capital Initiatives. James Hutton Institute, 16 pages
- Faccioli, M., McVittie, A., Glenk, K., Blackstock, K. (2016) Natural Capital Accounts: Review
 of available data and accounting options, 37pp. Report for the Scottish Government available
 at: http://www.hutton.ac.uk/research/srp2016-21/wp141-natural-asset-inventory-and-accounts
- Faccioli, M., Creaney, R., Novo, P., Byg, A., Martens, K. (2016). Unpacking the notion of
 public goods from agriculture and forestry in Aberdeenshire and mapping their availability: a
 workshop report. Report for the EU Commission on local stakeholder workshops for the
 project PROVIDE, February 2016.
- Byg, A.; Faccioli, M.; Novo, P.; Martens, K. (2016). D.3.2. Report synthesizing the findings
 of the CSR level mapping of public good demand and supply, its underlying determinants,
 producers and beneficiaries. PROVIDE project report for the EU Commission

CONFERENCE PRESENTATIONS AND INVITED TALKS

2020

- 25th European Association of Environmental and Resource Economists, online *presenter* and Thematic Session organiser: Natural capital accounting across scales: development, critique and usefulness for policy-making
- Natural Capital Symposium, Stanford University, San Francisco (USA) presenter (*)

(*) cancelled due to Covid-19

2019

- International Choice Modelling Conference (ICMC), Kobe (Japan) presenter
- 24th European Association of Environmental and Resource Economists, Manchester (UK) presenter
- The LEEP Institute's meeting of International Excellence in Environmental and Resource Economics. – presenter and keynote speaker's chair

2018

- Invited talk at the VII Envecho meeting: European workshop on Discrete Choice Experiments, Catania (Italy) *presenter*
- Research network on Economic Experiments for the Common Agricultural Policy (REECAP),
 Vienna (Austria) presenter

- Internal LEEP seminar, University of Exeter presenter
- 6th World Congress of Environmental and Resource Economists, Gothenburg (Sweden) parallel session chair and presenter
- Envecon 2018: Applied Environmental Economics Conference, London (UK) presenter

2017

- Valuing Nature Annual Conference, Edinburgh (UK) presenter
- 23rd EAERE Annual Conference, Athens (Greece) presenter
- International Peatlands Conference, Aberdeen (UK) presenter.
- ESCOM (Ecosystem Service Community) conference, Edinburgh (UK) presenter.
- Invited seminar presentation at the University of St. Andrews department of Environmental Economics and Policy, St. Andrews (UK) *presenter*.
- Envecon 2017: Applied Environmental Economics conference, London (UK) presenter.
- Workshop on natural capital accounting at the local and landscape scale, Perth (Scotland) attendance.

2016

- Internal Seminar at the James Hutton Institute, Aberdeen (Scotland) presenter.
- Young Researchers using Statistics Symposium, Aberdeen (UK) presenter
- Facing the Future: Realising Resilience, Aberdeen (UK) presenter
- Workshop on Experiments for Environmental Policy Formation, Stirling (Scotland) attendance.

2015

- Envecon 2015: Applied Environmental Economics Conference, London (UK) presenter.
- 21st EAERE Annual Conference, Helsinki (Finland) presenter.
- Internal seminar of the Department of Applied Economics at the University of the Balearic Islands, Palma de Mallorca (Spain) – presenter.

2014

- Invited talk at the University of Aberdeen Business School, Aberdeen (Scotland) presenter.
- MASTS Coastal Zone Forum, Annual Crieff Interdisciplinary Workshop on: "Coastal Ecosystem Management and Valuation", Crieff (Scotland) *presenter*.
- Choice modelling workshop, Stirling (Scotland) presenter.
- 16th Annual Bioecon Conference Biodiversity, Ecosystem Services and Sustainability, Cambridge (UK) – parallel session chair and presenter.
- Workshop in Intergenerational Equity and Efficiency under Uncertainty, Camp Reinsehlen (Germany) – presenter.
- 1st International Symposium on Natural Resource Management" Understanding Wetlands: A Key Issue in the Transition to a Sustainable Economy", Palma de Mallorca (Spain) – presenter.
- Envecon 2014: Applied Environmental Economics Conference, London (UK) presenter.

2013

- Celebrating and Enhancing the Tourism Knowledge-based Platform: A Tribute to Jafar Jafari, Palma de Mallorca (Spain) attendance.
- 14th International Economics Conference attendance.

2012

• IV Workshop on Valuation Methods in Agro-food and Environmental Economics, Barcelona (Spain) – attendance.

RELEVANT TRAINING

2020

- Resilient Career Planning in Uncertain Times, Exeter (UK)
- Marie Curie and European Research Funding, Exeter (UK) (*)
- Introduction to Python, Exeter (UK) (*)

(*) cancelled due to Covid-19

2019

- Writing 4* Research Papers. Exeter (UK)
- Online surveys in Qualtrics, survey experiments, and causal inference, Exeter (UK)
- Experimental methods workshop, Exeter (UK)
- Evaluation and Impact workshop, Exeter (UK)

2018

- Research Integrity, Exeter (UK)
- Information Security for Researchers, Exeter (UK)
- Recruitment training, Exeter (UK)
- Health and Safety Introduction, Exeter (UK)

2017

- Recruitment training, Aberdeen (UK)
- Workshop on Spatial Dimensions in Stated Preferences, Athens (Greece)
- Advanced choice modelling course, London (UK)
- Grant application writing workshop, Dundee (UK)
- Personal Performance and Development Review training course, Aberdeen (UK)
- Health and safety in the workplace, Aberdeen (UK)
- Unconscious bias training, Aberdeen (UK)

2016

Young Researchers using Statistics Symposium, Aberdeen (UK)

2015

• Training in qualitative research methods, University of the Balearic Islands (Spain)

2014

- Training course in academic writing, St. Andrews University (Scotland)
- Latex for beginners, St. Andrews University (Scotland)
- Training course in editing academic writing, St. Andrews University (Scotland)
- Summer School in Intergenerational Equity and Efficiency under Uncertainty, Camp Reinsehlen (Germany)
- Training course in relationship and communication management, University of the Balearic Islands (Spain)
- Training in face-to-face communication: how to move from information to communication, University of the Balearic Islands (Spain)

2013

• Discrete Choice Modelling course, London (UK).

SCHOLARSHIPS, GRANTS AND AWARDS

2020

 Strategic Priorities Fund – Research Fund to support evidenced-based Policy Making (P.I.), £9,428

Project start: March 2020; Project end: July 2020

• Above and Beyond, University of Exeter (2020)

2019

 ESRC IAA: Applying recent insights in market design to achieve environmental benefits (Co-I.)

Project start: September 2019; Project end: 2021

- International Advisory Board research fund (P.I.), £ 9,750
 Project start: 1 September 2019; Project end: 31 August 2020 extended
- NERC-funded SWEEP project: Delivering natural capital assessment tools for the marine economy in the South West (Co-I.), £849,212

Project start: 1 April 2019; Project end: 31 December 2021

2018

 CUHK-University of Exeter Joint Centre for Environmental Sustainability and Resilience (ENSURE) funded project: Global Food Security, Climate Change and Resilience: An International Perspective (temporary P.I. & Co-I.), £348,200
 Project start: 1 January 2019; Project end: 31 December 2020 – extended

prior to 2018

• Ph.D. scholarship (Beca del Programa de Formación de Profesorado Universitario - FPU)

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- awarded by the Ministry of Education, Culture and Sport (Spain), €60,252 (£55,245). Duration: Dec. 2011 Dec. 2015.
- Financial grant for special actions of research and development, awarded by the Balearic Islands' Government of Education, Culture and University (Spain). €13,950 (£12,791). Duration: 2012 2013.
- Research scholarship (Beca de Colaboración) awarded by the University of the Balearic Islands (Spain). ~€4.200 (~€3,851). Duration: Mar. 2011 – Aug. 2011.
- Sol Meliá grant for research in tourism awarded by the Sol Meliá group (Spain). ~€1,000 (~£917). Duration: 2009 2010.
- Study grant for special academic merits awarded by the Autonomous Province of Bolzano (Italy). ~€2,000 (~£1,834). Duration: 2007 2009.

TEACHING

2015 Environmental economics

Master program in Tourism and Environmental Economics at the University of the Balearic Islands

(Spain), with C. Torres.

2020 Natural Capital, Freshwater Ecosystems Services, and Protecting our Future Natural Resources -

Bringing the Environment into Economic Decision-Making

GW4 FRESH NERC Centre for Doctoral Core-Skills Training at the University of Exeter, with I. Bateman

SUPERVISION

2019 - 20 Joel Lamb

Undergraduate economics' student dissertation at the University of Exeter Title: Estimating the effects of a carbon tax on meat demand in the UK

SKILLS

First language Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Spanish	C2	C2	C2	C2	C2
German	C1	C1	C1	C1	C1
French	B1	B1	B1	B1	B1
Catalan	B1	B1	A2	A2	A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

Common European Framework of Reference for Languages

Communication skills good communication skills, acquired through conference presentations and specific

training courses

Technical skills

- economic valuation of the environment
- · natural capital accounting
- econometric skills e.g. discrete choice modelling
- · survey design and survey implementation
- experimental design
- GIS skills

Computer skills (software programmes)

Matlab, Ngene, QGIS, Stata, Nlogit, R, Microsoft Office

PROFESSIONAL SERVICE

- Chair of the weekly team meetings at the Land, Environment, Economics and Policy (LEEP) Institute
- LEEP seminar series' co-organizer
- SWEEP Impact advisory Working Group, University of Exeter, Plymouth University and Marine Laboratory (UK)
- Early Career Researchers Liaison Forum, University of Exeter (UK)
- Recruitment services

Journal reviewer for: Ecosystem Services; Land Use Policy; Ecological Economics; Agricultural and Resource Economics; Resource and Energy Economics; Environmental and Resource Economics; Science of the Total Environment.

MEMBERSHIPS AND HONORARY AFFILIATIONS

- European Association of Environmental Economists (EAERE)
- UK Network of Environmental Economists (UKNEE)
- Scottish Stated Preference Network (SSPN)
- Research group on the Economic Analysis of the Impacts of Tourism (AEIT) at the University of the Balearic Islands (Spain)
- Honorary Research Associate at The James Hutton Institute, (Scotland, UK)

CONTACT

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Twitter: @MFaccioli

Research Gate: https://www.researchgate.net/profile/Michela_Faccioli

Personal webpage: http://michelafaccioli.weebly.com/

 $\underline{\text{https://business-school.exeter.ac.uk/about/people/profile/index.php?web_id=Michela_Faccioli}$

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REFERENCES

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University of Exeter Business School
Brett.Day@exeter.ac.uk

Dr. Patricia Melo University of Lisbon (Portugal) / The James Hutton Institute (UK) pmelo@iseg.ulisboa.pt / Patricia.Melo@hutton.ac.uk

Dr. Klaus Glenk Scotland's Rural College (UK) Klaus.Glenk@sruc.ac.uk

Prof. Antoni Riera Font University of the Balearic Islands (Spain) antoni.riera@uib.es