

Job title	Postdoctoral Researcher (Climate Econometrics)
Department	Nuffield College, University of Oxford
Location	1 New Road, Oxford, OX1 1NF
Grade and salary	Grade 7, £32,236 per annum
Hours	Full time (35 hours/week)
Contract type	Fixed term for 3 years
Reporting to	Director, Co-Director, and project Research Fellow

The role

Applications are invited for a post-doctoral researcher with a background in Economics with a focus on wide-sense non-stationary time series Econometrics or spatio-temporal data to contribute to the '**Climate Econometrics (CE)**' project (<http://www.climateeconometrics.org/>), whose principal aim is to improve the understanding of the impact of humanity on climate and *vice versa*. The role will be based at Nuffield College, University of Oxford beginning on 1 October 2019 or as soon as possible thereafter. The position is full-time, fixed-term for 3 years.

The post holder will contribute to the research objectives of CE through the development of their own independent research, and collaboration with the central team and the wider research community. The post holder is expected to contribute to, and benefit from, the knowledge exchange between econometric modelling, climate science, and the economics of climate change.

CE will provide computer support and funding to present research findings at international conferences and workshops relevant to the project.

Overview of the project

The Climate Econometrics project concentrates on developing and applying empirical methods to augment climate-economic research by helping to disentangle complex relationships between human actions and climate responses and their associated economic effects. We aim to improve our understanding of the impact of humanity on climate and *vice versa*, as well as how econometrics can be used in climate-economic research.

The project started in 2015, focusing on the development, application and communication of new methods to analyse large and complex sets of climate information, both by empirically estimating the impact of human activity onto climate, as well as considering the economic impacts of climate change. The project consists of researchers with backgrounds in econometrics, environmental science, econometric computing, and oceanography. Ongoing research includes applying econometrics to policy problems concerning hurricanes, sea-level change, anthropogenic emissions, temperature changes, beliefs about climate change, and geodesy as well as developing new econometric methods and software for modelling and forecasting.

We share a commitment to bring together researchers in the field of *Climate Econometrics* through an international network, and to facilitate the dissemination of Climate Econometrics to the wider Climate Science community. To this end, we organise a regular Climate Econometrics conference series <http://www.climateeconometrics.org/conference2018/> and arrange sessions at the European Geoscience Union General Assembly and American Geophysical Union Fall Meeting.

The project is funded by the Robertson Foundation and Nuffield College, and is supported by an international scientific advisory group consisting of Nobel Laureate Robert Engle (NYU), Karen Florini (Climate Central), Prof Cameron Hepburn (Oxford) Prof Robert Kaufmann (Boston), Prof Michael Oppenheimer (Princeton), Prof Thomas Sterner (Gothenburg), and Prof James Stock (Harvard).

Responsibilities/duties

For the Climate Econometrics Research Group

- Undertake independent original research on climate econometrics that contributes to the research agenda of the CE project.
- Manage own academic research and administrative activities. This involves small scale project management to co-ordinate independent and collaborative research.
- Contribute to the knowledge exchange between econometrics, economics and climatology.
- Adapt existing and develop new econometric research methodologies, with a focus on linking climate sciences and empirical economics.
- Contribute and develop ideas for new research projects.
- Collaborate in the preparation of research publications, and communication to policy makers and the public.
- Present research at national/international conferences and research workshops, represent the research network at external meetings/seminars.
- Carry out collaborative projects with colleagues in partner institutions and research groups.
- Work and conduct themselves in compliance with the University's code of practice and procedure for academic integrity in research and relevant research governance procedures, (including those governing ethical research conduct, data protection, and Health and Safety).

For Nuffield College:

- Participate in the intellectual life of the College by attending, and where possible by organising seminars, workshops, conferences, and other academic events.

For the collegiate University:

- Optionally, and with the agreement of the Project Director, undertake a small amount of *ad hoc* paid teaching or supervision within the collegiate University.

The person appointed will be based at Nuffield College and will work under the supervision of Professor Sir David Hendry, the Project Director.

Selection criteria

Essential

- Holding or being close to completing a PhD/DPhil in Economics with a major focus on the theory of wide-sense non-stationary time-series Econometrics and its applications.
- A demonstrated interest in climate change and related research, evidenced by research and professional activities to date.
- Experience of working with statistical software environments, e.g. R, Ox, Matlab, Python.
- Evidence of research ability including scholarly publications and presentations at international conferences, commensurate with the candidate's career stage.
- Ability to contribute innovatively to econometric methods relevant to non-stationary climate data and undertake empirical analyses thereof.
- Excellent written and oral communication skills, including representing the project at meetings.
- Ability to manage own academic research and associated activities.
- Ability to contribute ideas for new research projects.
- Ability to work in an inter-disciplinary environment collaborating with researchers spanning multiple fields from economics to climate science, and to network effectively and build new contacts.

Desirable

- Experience in empirical modelling of wide-sense non-stationary time-series or spatio-temporal data.
- Background knowledge of climate science.
- Experience in non-technical communication of research findings.
- Experience of writing grant applications or securing external research funding.

How to Apply

To apply online for this vacancy, please click on the 'Apply' link below. This will take you to the Interfolio Web Recruitment System, where you will need to register for an account (if you have not done so previously) and log in before completing an online application.

For the online application you will be asked to complete an **application form** and a **recruitment monitoring form**, and to upload the following documents:

- A **cover letter** detailing your motivation to participate in the project, highlighting any background in statistics/econometrics and in policy communication, with a short outline of your proposed strategy, noting how your research augments existing Climate Econometrics projects.
- A **Curriculum Vitae** including full list of publications/working papers (please indicate your contribution if papers are co-authored).

You will also be asked to ensure that **three full references (including two academic references)** are received via the Interfolio platform by the closing date. As part of the application process, applicants will be asked to provide their referees' names and email addresses which will generate email reference requests from Interfolio to the referees, who will be invited to upload their confidential references directly to the Interfolio platform.

[APPLY](#)

If you have any technical difficulties submitting your online application, please contact Interfolio at help@interfolio.com. For other queries, please contact the College Registrar at pprf@nuffield.ox.ac.uk.

If, for your convenience, you wish to submit a hard-copy application, please contact the College Registrar at pprf@nuffield.ox.ac.uk. Interfolio is a US-based service which processes data on servers based outside the EEA, but which complies with the EU-U.S. Privacy Shield Framework (see www.interfolio.com/privacy-policy/). Information submitted via hard-copy is not processed through Interfolio.

The closing date for receipt of completed applications is **12.00 noon (UK time) on Monday 21 January 2019**. Interviews are likely to take place in early February 2019.

TERMS AND CONDITIONS

Full terms and conditions of employment will be provided in writing to the successful candidate. The information below is for guidance only and does not constitute a contract of employment.

Duration

The post is fixed-term for three years, subject to the normal pre-employment checks and satisfactory completion of a six-month probation period.

Salary

The salary for the post will be £32,236 per annum (Grade 7). Salaries are paid in arrears on the 28th of each month (or where the 28th is not a working day, on the last working day before the 28th) as detailed on the payslip. Salaries are reviewed annually in August, although the College is under no obligation to award an increase following a salary review.

Hours of Work

The post is full time and the normal hours of work are 35 hours per week, exclusive of meal breaks. It is essential that the post holder is able to provide some flexibility with working hours in order to meet the demands of the post and for which time off in lieu will be given.

Holiday Entitlement

The post holder will be entitled to 41 days paid leave per annum inclusive of all public holidays and College closure days. Annual leave should be agreed with your Line Manager, as appropriate.

Pension

The post holder will be contractually enrolled in the University Superannuation Scheme (USS) from the commencement of your employment, unless he or she opts out by completing and returning to the HR department the relevant form.

Meal Entitlement

Coffee, tea and lunch, whilst on duty, will be provided free of charge except during any kitchen closure period. The post-holder is also entitled to two academic High Table dinner guests per term at the expense of the College.

Other Benefits

Employees will be eligible for childcare vouchers and a discounted travel to work scheme for the purchase of bus and train tickets.

Training

The College will support the post-holder to undertake any relevant training to enhance his or her career and financial support for these development activities will be provided where appropriate.

Oxford Colleges' Healthcare Plan

The post holder will be eligible to join the Oxford Colleges' Healthcare Plan from the commencement of employment. The College will pay for a single membership of the Plan, but you may upgrade, at your own expense, your membership to cover your partner / spouse or your family. As this is a work benefit you will pay tax on the Subscription Rates.

Equal Opportunity statement

The policy and practice of the University of Oxford and Nuffield College require that all staff are afforded equal opportunities within employment. Entry into employment and progression within employment will be determined only by personal merit and the application of criteria which are related to the duties of each particular post and the relevant salary structure. In all cases, ability to perform the job will be the primary consideration. Subject to statutory provisions, no applicant or member of staff will be treated less favourably than another because of age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation. Where suitably qualified individuals are available, selection panels will contain at least one member of each sex.

Data Protection

All data supplied by candidates will be used only for the purposes of determining their suitability for the post and will be held in accordance with the principles of the General Data Protection Regulation (GDPR), the Data Protection Act 2018, and the College's Data Protection Policy.

Pre-employment screening

If you are selected for the post, employment with the College will be conditional upon satisfying the following requirements:

Eligibility to work in the UK

The Immigration, Asylum and Nationality Act 2006 makes it a criminal offence for employers to employ someone who is not entitled to work in the UK. We therefore require applicants to provide proof of their right to work in the UK before employment can commence.

Please note that you will need to provide original documents and where any documents are not in English a certified translation will be required. Do not include these documents with your application. You will be sent a request for the relevant information at the appropriate point in the selection process.

Successful applicants who do not currently have the right to work in the UK will be required to apply for permission to do so under the current UK immigration system.

Medical fitness

Please note that any offer of employment will be conditional upon receipt of a completed pre-employment medical health assessment questionnaire and confirmation from the University of Oxford Occupational Health Service that the candidate is medically fit for the post (allowing for any reasonable adjustments that may be required, in line with the provisions of the Equality Act 2010).

The purpose of the pre-employment medical health questionnaire is to:

- Assess the candidate's medical capability to do the job for which they have applied;
- Determine whether any reasonable adjustments or auxiliary aids may be required to accommodate any disability or impairment which they may now have;
- Ensure that none of the requirements of the job for which they have applied would adversely affect any pre-existing health conditions the candidate may have.

Further Information

NUFFIELD COLLEGE

Nuffield College is a graduate college within the University of Oxford which was founded in 1937 and specialises in the Social Sciences, particularly Economics, Politics, and Sociology. It aims to be one of the world's outstanding social science institutions, providing a stimulating research-orientated environment for postgraduate students, research fellows, and senior academics and promoting, according to its Charter, "the study by co-operation between academic and non-academic persons of social (including economic and political) problems". About 30 students are admitted each year to undertake both taught masters courses and doctoral research for many of whom the College provides financial support in the form of studentships. In total there are about 100 students enrolled at any one time, many of whom either live in College or have offices in College.

Postdoctoral Fellows are an integral part of the College and its academic activity. In 2018-19 there are 42 Research Fellows in College of whom 10 are College-funded Prize Postdoctoral Fellows, 12 are funded jointly with the Economics Department, and the remainder are funded by external awards or by the Departments of Economics, Politics and International Relations; Sociology; and Social Policy and Intervention.

The College has in addition 36 permanent academic Fellows (of whom 6 are College-funded Official Fellows), 28 non-academic Visiting Fellows drawn from the world of business, industry, politics and administration; and a number of Research Officers working on research projects run by the College's Fellows. The College enjoys strong links with the University's social science departments and works closely with the Social Sciences Division.

Nuffield College has been – and continues to be – the source of some of the major research developments in social science. These include the British Election Studies and the major programme of research on Social Mobility in Britain. It was the birthplace of the "Oxford School" of Industrial Relations; it pioneered the development of cost benefit analysis for developing countries; and it has made a major contribution to the methodology of econometrics. At the moment the College hosts five research centres: the Centre for Experimental Social Sciences (CESS); the Centre for Social Investigation (CSI); the Gwilym Gibbon Centre for Public Policy Research, the Nuffield Centre for Applied Macro Policy (NuCAMP), and the Climate Econometrics project (see further information below).

Research Facilities

The size and specialised nature of the College enable its members to work closely with one another in a stimulating and research-orientated environment. A 'critical mass' of students and Fellows working in the social sciences is helpful both in terms of facilities and of intellectual activity, such as the active seminar and conference programme.

The College Library is one of the finest in the social sciences and functions as a research library, reflecting the academic interests of the Fellows. The Library is open shelf and

accessible 24 hours a day. Fellows also have access to all the facilities of the Bodleian Library, including full-text access to nearly all journals in the social sciences.

The College has an Information Systems Department to serve the computing needs of Fellows and staff.

Research Centres in Nuffield College

The College currently hosts five research centres, focusing on different aspects of and approaches to the study of social sciences:

The **Centre for Experimental Social Sciences (CESS)** was established to promote and facilitate experimental research by social scientists in Oxford. The CESS offers an on-site laboratory with 25 computer stations, and maintains a large subject pool. The facilities are designed to support a wide range of experiments. The CESS also maintains an online panel of UK residents, and provides support for fielding online survey experiments. Fellows are eligible to conduct lab and online experiments at a discounted rate subsidised by the College and the Social Science Division. The CESS has a regular seminar series that highlights the work of renowned scholars employing experimental methods. Periodic workshops held by the CESS provide training for researchers in experimental research design, experimental data analysis, and programming languages (including ztree and Qualtrics). More information on CESS is available at <https://cess-web.nuff.ox.ac.uk/>.

The **Centre for Social Investigation (CSI)** is an interdisciplinary research programme; in keeping with the College's Charter which emphasizes "the study by co-operation between academic and non-academic persons of social (including economic and political) problems", the Centre aims to address contemporary social issues of public interest and to engage with policy-makers and the public more generally, carrying out authoritative, non-partisan research on central social issues which draws upon expertise in economics, politics and sociology and related disciplines such as social policy. The Centre seeks to establish itself as an independent and rigorous source of information and analysis of contemporary social issues, communicated in an accessible way to nontechnical audiences, in addition to publishing technical work for academic audiences. Professor Anthony Heath serves as Director for the CSI, assisted by post-doctoral researchers. More information on CSI is available at <http://csi.nuff.ox.ac.uk/>.

The **Gwilym Gibbon Centre for Public Policy Research** was established with the aim of bridging academia and public affairs through the provision of rigorous academic analysis of public policy issues (mainly in the UK). The Centre's inaugural director was Professor Iain McLean who undertakes research in response to calls for evidence from parliamentary bodies and government or as part of externally funded research projects. From September 2018, Professor Jane Green has joined the College and has taken over the directorship of the Gwilym Gibbon Centre, with the aims of promoting innovative research in British politics and policy, and fostering partnerships between the academic and non-academic/policy world.

The **Nuffield Centre for Applied Macro Policy (NuCAMP)** was established in the Summer of 2017 to create a space in which academics and policymakers can freely and openly discuss current trends, insights and policies that influence how economies function. Through its convening power and activities focussed on holding conferences, workshops and visitor programmes, NuCamp fosters the development of fresh analytical and empirical approaches that promise to create better links and improved knowledge exchange between the academic and policy worlds of macroeconomic problems.

The **Climate Econometrics** project and network, under the leadership of Professor Sir David Hendry, is based at Nuffield College, in collaboration with the Department of Economics at the University of Victoria, and the Environmental Defense Fund. The research is funded by the Robertson Foundation. The project and network concentrate on developing econometric methods to augment climate-economic research by helping disentangle complex relationships between human actions and climate responses and their associated economic effects,

masked by stochastic trends and breaks. The project team aims to improve our understanding of the impact of humanity on climate and vice versa, as well as on how econometrics can be used in climate-economic research, and bring together researchers in the field of Climate Econometrics through an international network.

About the University of Oxford

Oxford's departments and colleges aim to lead the world in research and education for the benefit of society both in the UK and globally. Oxford's researchers engage with academic, commercial and cultural partners across the world to stimulate high-quality research and enable innovation through a broad range of social, policy and economic impacts.

Oxford's self-governing community of international scholars includes Professors, Associate Professors, other college tutors, senior and junior research fellows and over 2,500 other University research staff. Research at Oxford combines disciplinary depth with an increasing focus on inter-disciplinary and multi-disciplinary activities addressing a rich and diverse range of issues. The current strategic plan can be found at www.ox.ac.uk/about/organisation/strategic-plan.

Oxford's strengths lie both in empowering individuals and teams to address fundamental questions of global significance, and in providing all staff with a welcoming and inclusive workplace that supports everyone to develop and do their best work. Recognising that diversity is a great strength, and vital for innovation and creativity, Oxford aspires to build a truly inclusive community which values and respects every individual's unique contribution.

While Oxford has long traditions of scholarship, it is also forward-looking, creative and cutting-edge. Oxford is one of Europe's most entrepreneurial universities. It consistently has the highest external research income of any university in the UK (the most recent figures are available at www.ox.ac.uk/about/organisation/finance-and-funding), and is ranked first in the UK for university spin-outs, with more than 130 spin-off companies created to date. Oxford is also recognised as a leading supporter of social enterprise.

Oxford admits undergraduate students with the intellectual potential to benefit fully from the small group learning to which Oxford is deeply committed. Meeting in small groups with their tutor, undergraduates are exposed to rigorous scholarly challenge and learn to develop their critical thinking, their ability to articulate their views with clarity, and their personal and intellectual confidence. They receive a high level of personal attention from leading academics.

Oxford has a strong postgraduate student body which now numbers over 10,000. Postgraduates are attracted to Oxford by the international standing of the faculty, by the rigorous intellectual training on offer, by the excellent research and laboratory facilities available, and by the resources of the museums and libraries, including one of the world's greatest libraries, the Bodleian.

For more information please visit www.ox.ac.uk/about/organisation.

The Social Sciences Division

The University's academic departments and faculties are organised into four large groups, known as Academic Divisions (Social Sciences, Mathematical, Physical and Life Sciences (MPLS), Medical Sciences, and Humanities). The academic divisions are responsible for academic oversight of the teaching and research of their constituent departments and faculties, for strategic and operational planning, and for personnel and resource management. The Head of the Social Sciences Division is Professor Sarah Whatmore, who is a member of the University's Council. The Social Sciences Division is a world-leading centre of research and education in the social sciences. The social sciences at Oxford are distinctive for both

their depth and breadth, with activity spanning fourteen departments and faculties and one cross-divisional unit. (These are as follows: Law, the Saïd Business School, Economics, Politics and International Relations, the Blavatnik School of Government, the School of Anthropology and Museum Ethnography, International Development, Sociology, Social Policy and Intervention, the Oxford Internet Institute, Archaeology, the School of Interdisciplinary Area Studies, Education, the School of Geography and the Environment, and the Oxford Martin School). Interdisciplinary links within and beyond the university are strong, extending to the humanities, natural sciences, and medical sciences.

Academic and research staff and research students are engaged in world-leading research that challenges current ideas and theories and is tackling some of the major challenges facing humanity, such as sustainable resource management, migration, governance, poverty and development, and justice. The 2014 Research Excellence Framework confirmed Oxford as the UK powerhouse for research in the social sciences, where Oxford accounted for more world-leading (4*) research than any other institution, across the social sciences units of assessment to which it made submissions. The division has an extensive portfolio of external funders and collaborators, with competitively-awarded external research income exceeding £40 million per year. Researchers in the division engage actively beyond academia and their research has influence in many spheres from innovation in public policymaking to practitioner communities such as law, business, education, social welfare and NGOs.

The division also delivers an exceptional range of high quality educational programmes (undergraduate, postgraduate taught and postgraduate research), all of which are underpinned by the innovative research being undertaken by our academics. Programmes range from those at the interface of the natural sciences, through to professionally-oriented provision in areas such as business, law and education. The division is home to several of Oxford's most widely recognised teaching programmes, such as Philosophy, Politics and Economics (PPE); the Bachelor of Civil Law (BCL); the MPhils in International Relations, in Economics, and in Development Studies; the MBA and EMBA; and the nationally regarded Postgraduate Certificate in Education (PGCE).

For more information please visit: www.socsci.ox.ac.uk/.

Nothing in these particulars constitutes a contract.

Nuffield College exists to promote excellence in education and research, and is an equal opportunities employer committed to equality and valuing diversity. Applications are particularly welcome from women, from disabled people, and from black and minority ethnic candidates, who are currently under-represented in posts in the College.