

Institution: University of Nottingham

Unit of Assessment: Economics and Econometrics

1. Unit context and structure, research and impact strategy

a) Overview

The School of Economics at University of Nottingham hosts one of the United Kingdom's largest and most internationally diverse group of researchers in the field of economics and econometrics. The School offers an interdisciplinary research environment spanning all the core themes of modern economics and econometrics together with international economics, development studies, behavioural science, political economy and a growing interest in economic data science.

A growing department with an expanding group of younger faculty, the School continues to rise in international and national research rankings and is expanding into new research areas alongside building on existing strengths. The School is a hub for international, interdisciplinary, high-impact research initiatives including the Nottingham - Bank of England – Stanford Decision Maker Panel, the Centre for Globalisation and Economic Policy and the ESRC Network for Integrated Behavioural Science.

Through the challenges presented by Covid-19, the unit has proven itself to be sustainable, with a strong financial support base and experienced research leadership. The resilience of the School's financial position derives from the diversified research income portfolio, high entry tariff of the undergraduate programme, sustainable intake of the MSc programme (with significant geographic diversification in the intake) and ongoing core funding for research activities. These have each proven resilient to the financial turbulence presented by Covid-19. Since the School has undertaken prudent financial management and sustained its finances with an increase in external research grant capture during this period, it has been able to preserve existing human capital and has made new appointments. The sustainability of the School's financial underpinnings has supported new research opportunities arising from the Covid-19 pandemic and feed into national and local government policy responses, while maintaining the creativity and vitality of the full portfolio of research activity.

b) Highlights

Research achievements of the School during the REF period include:

- The School **consistently ranks within the top-10 economics departments in the UK and the top-40 economics departments in the world** according to the Tilburg Economics Ranking and top 35 economics departments in the IDEAS ranking, ranking 33rd in the world ranking as of January 2020. The School ranks 6th within the UK in the Tilburg ranking and 5th within the UK in the IDEAS ranking. For cognitive and behavioural science, the School ranks 2nd in the world according to the IDEAS ranking.
- Whereas the School did not have any female professors at the time of the REF 2014 submission, it now has **five female professors (Barr, Montero, Rickne, Sonderegger and Testa)**, including among them the appointment of the first female Director to one of the School's Research Centres (Testa) and the first Deputy Head of School (Barr). In three cases, new female professorships were obtained via successful internal promotions.
- Since 2017, the launch of new research initiatives within the School including programmes in **Gender Economics** and the **Nottingham Decision Maker Panel**, which have attracted substantial University and external funding and support.

- Substantial increase in **investment in junior training and hiring**, reflected in the School becoming fully-engaged in the European and American job market rounds and a significant increase in starting salaries of junior faculty hires on par with, and in many cases exceeding, the offerings of other top UK economics departments. Over the REF period, the School has made junior hires out of PhD programmes at, *inter alia*, University of California Berkeley, Northwestern university, University of California San Diego, University of Wisconsin-Madison, University of California, Los Angeles, SciencesPo, Barcelona Graduate School, and University of Maryland.
- The School has contributed to research on the effects of the Covid-19 pandemic. UKRI rapid response grants for new research relating to Covid-19 were obtained by **De Fraja, Gathergood, Mizen and Starmer**, together with re-purposing of funding received by the Decision Maker Panel and Network for Integrated Behavioural Science. Bradley, Ruggieri and Spencer received a British Academy Special Research Grant to work on the effects of Covid-19 on the labour market. The School has engaged enthusiastically with the UKRI-funded Economics Observatory. Those grant holders are also regular contributors to print media including the Financial Times, Economist, Wall St Journal, New York Times, Times, Sunday Times, Independent, Guardian, Telegraph, Bloomberg, Reuters and VoxEU.

c) Context and Structure

The School of Economics hosts over 55 academics and 60 PhD students, together with a large postgraduate community of more than 150 students complemented by an academically thriving undergraduate community of over 1,000 students. Over the past two decades, the School has grown in both size and diversity of research and in research environment, with interdisciplinary research interests spanning Development Studies, Behavioural Science, Political Economy and Data Science.

With this growth in size and diversity, the School's research is now represented in multiple submissions to the REF exercise. The School's research seeks to contribute to both disciplinary and interdisciplinary fields and sub-fields and avoids a silo-based approach limited to particular REF units. Of particular note, the large and growing Centre for Development and International Trade (CREDIT) contributes to the University's submission to UoA22 Anthropology and Development Studies. School staff and fellows also contribute to the submission to UoA17 Business and Management Studies. While this submission focuses on the School's contribution to UoA16 Economics and Econometrics, it arises from the broader context of a thriving, diverse and multi-faceted interdisciplinary School.

The main research activity in the School is organised into Research Centres and research initiatives. Research centres constitute core groups of internal and external fellows working in focused areas representing the School's research strengths. They convene research projects, conferences and seminar programmes, together with building technical and intellectual capacity to showcase and disseminate impact-oriented research success in the School. Over the REF period, the School has invested in both existing Centres and Initiatives and invested in new undertakings.

Throughout the REF period the School has built on the achievements of its existing **Research Centres** and has broadened its research portfolio into new areas:

- Behavioural Economics research at Nottingham is represented by the **Centre for Decision Research and Experimental Economics (CeDEx)**, which hosts the **ESRC Network for Integrated Behavioural Science (NIBS)**.
 - **CeDEx** is a world-leading research group that investigates human decision-making using theoretical and experimental methods. CeDEx has global reach, produces cutting-edge research with societal impact and is consistently highly ranked in the

- field of Behavioural Economics. During the REF period, CeDEX has expanded internationally, with a new laboratory at University of Nottingham, Ningbo, China.
- **NIBS** is a partnership among the Universities of Nottingham, Warwick and East Anglia. NIBS was established as a cross-disciplinary group of researchers who develop and test models of human behaviour and behavioural change, and draw out their implications for the formulation and evaluation of public policy. Hosted at Nottingham, NIBS has received in excess of £7m in ESRC funding since inception in 2012 in the form of a Centre Grant and follow-on Large Grant. NIBS hosts two annual events and is heavily involved in research impact generation, further detailed below.
 - The Nottingham Centre for Research on **Globalisation and Economic Policy (GEP)** is the major centre in Europe studying the impact of globalisation and economic policy and one of the biggest of its kind in the world. GEP has invested in its international profile, with burgeoning research hubs at the University campuses in China and Malaysia, a new programme on productivity and international trade. GEP has also made strategic appointments of **Rodriguez-Clare** (part-time) at a senior level and **Graziano, Spencer, Tian, Vizcaino** at the junior level.
 - The **Granger Centre for Time Series Econometrics** has received new strategic direction and leadership with the appointment of **Trapani** as Director and increasing interaction with international researchers based at the University's China Campus. The Granger Centre has also expanded its research portfolio with new investments in Data Science and a forthcoming MSc programme in Economics and Data Science. The Granger Centre Seminar Series has expanded to become the UK's largest seminar programme focusing on Time Series Econometrics.
 - The **Nottingham Interdisciplinary Centre for Economic and Political Research (NICEP)** was established in 2015 through a collaborative effort between the School of Economics and University of Nottingham's School of Politics and International Relations to promote interdisciplinary work at the intersection between Economics and Politics. Supported by a University Research Board Discipline Bridging Award and a member of the POLECONUK (Political Economy UK) network, the Centre brings together very distinct approaches to the study of political institutions and public decision making. The centre aims to promote interdisciplinary work in four main thematic areas: Representation, Political behaviour, Political economy and public policy, and Quality of government. NICEP hosts an annual conference and in 2019 hosted the POLECONUK annual conference.
 - The **Centre for Finance, Credit and Macroeconomics (CFCM)** focuses on monetary policy, household and corporate finance and macro-economic dynamics. It has made new appointments at all levels including **Graziano, Jensen, Mukherjee, Ruggieri, Thwaites, Vigier, Vizcaino, Zu**. The Centre has a regular seminar series with speakers invited from Duke, Stanford, Princeton, MIT, LSE, UCL, NYU, Rochester, Federal Reserve, Oxford, and a new Macro Working Group for discussion of papers written by CFCM members. CFCM has received approximately £4m of grants from UKRI, Research England and ESCoE; it draws on data resources from CBI and UK finance. and has established an international reputation for research into survey data.

The School has also launched a number of new **research initiatives**, which complement the School's existing strengths

- A new research programme in **Gender Economics** seeks to understand the cause and consequence of gender inequality. The research programme is jointly led by new professors **Rickne** and **Sonderegger** and was launched by the 2019 Special Lectures on Gender Inequality, delivered by Rickne, covering topics including Gender quotas, couple formation and women's careers, and sexual harassment and gender inequality in the labour market. In 2020, the School hosted the new Annual Nottingham Workshop on the Economics of

Gender norms featuring keynote speeches by Sonja Vogt (Bern) and Andreas Kotsadam (Frisch Institute). A major project within this research initiative now underway at Nottingham focuses on difference in gendered language in reference letters, in a unique collaboration with the EconJobMarket job platform, which provides reference letters for the European Job Market.

- Established in 2016, the **Decision Maker Panel (DMP)** <https://decisionmakerpanel.co.uk/> is a flagship initiative between the University of Nottingham, Stanford University and the Bank of England to better understand uncertainties facing British business before, during, and after the United Kingdom's withdrawal from the European Union.
 - The DMP has trained over 120 analysts to recruit panel members to a survey of UK business leaders. The DMP has seen extensive research investment by the ESRC and Stanford University in addition to core investment from the University.
 - In addition to creating significant new assets for the measurement of uncertainty in the UK around Brexit, the DMP undertakes fundamental research into other sources of uncertainty. A UKRI funded project £804,000 links data collected on Covid-19 from Decision Making Panel, Management Expectations Survey and the ONS Business Impact of Covid-19 survey to address the Economic Impact of Covid-19.
 - A further £1.1m in support from the ESRC has been awarded for a collaboration between ONS, ESCoE, QMUL, Stanford and LSE by creating the UK Management and Expectations Survey (MES). This improves the understanding of the causes and consequences of the variation in management practices across UK businesses for improving productivity.
- A programme of research on **Covid-19** (<https://www.nottingham.ac.uk/economics/research/covid-19-research.aspx>), showcasing the UKRI and British Academy funded activity and contributing to the national effort, including contributions to the Economics Observatory, CEPR and the Conversation in addition to new original research papers on the topic.

d) Research Strategy 2014-2020

The School has delivered significant progress against the strategic objectives outlined in the REF 2014 Environment Submission:

- i) *Expansion of CeDEx lab facilities:* CeDEx conducts experiments in two dedicated lab facilities at University of Nottingham. During the REF period, the School has **undertaken major infrastructure investments in the CeDEx lab capacity** and business model (see Section 3b below)
- ii) *Increasing the number of School-funded postdoctoral fellowships:* The School recognises that completing PhD students need entry-points to academia suitable to their career and job market preparation. Not all students graduating from PhD programmes are ready to enter the job market for assistant professorships. Over the REF period, the School has expanded both traditional postdoctoral positions (offering at least two positions each year), but has also expanded its offer of knowledge exchange positions (including Knowledge Transfer Partnerships and ESRC NPIF fellowships, and teaching and research fellowships. Teaching and research fellows are required to undertake the same teaching loads as Assistant Professors, ensuring that this group of ECRs have time and opportunity to develop their research portfolio.
- iii) *Upgrading the School's job market preparation:* The School has launched into vigorous engagement with the **European and North American economics job markets**. Since 2016, the School has become a fully active participant in both placing students on, and recruiting students from, the European and North American job markets. This has

served to increase the quality of both hires and placements and upscale Nottingham's contribution to the international job market. As a sign of ongoing commitment to the annual job market, Nottingham will host the next European Job Market in 2021 (now scheduled for December 2021, previously postponed due to the Covid-19 pandemic).

- iv) *Increasing the number of School-funded PhD studentships:* the school has expanded and intensified its PhD training programme. The **adoption of an MRes/PhD model has increased the intensity and quality of the PhD training**, which is essential if students are to make meaningful contributions to knowledge and become competitive on the international job market for junior faculty.
- a. The new programme structure is an integrated one-year Masters in Research, from which students progress to the PhD in Economics. It includes one year of courses covering the tools, techniques and literature necessary for them to write a PhD dissertation at the forefront of the economics discipline; four years (maximum) of research under the guidance of faculty; support and resources to enable students to participate in the scientific community and achieve a top job market placement.
 - b. The school offers a minimum of seven fully-funded four-year studentships each year, in addition to studentships obtained via the ESRC Doctoral Training Partnership and other sources of external funding.
 - c. During the MRes year, students complete advanced-level taught modules in order to acquire the necessary skills and knowledge for research in economics. These are examined and students must pass to progress to our four-year PhD programme. Core modules taught in the first term are: Micro, Macro and Econometrics. In the second term, students can choose from advanced modules in: Macro, Micro Theory, Applied Econometrics, Behavioural Economics and Computational Economics. Masterclasses from visiting academic experts provide additional opportunities for training (for example, Petr Sedlacek, Oxford, and Pontus Rendahl, Cambridge, on Computational Macro; Andres Rodriguez-Clare, Berkeley, on Trade, Industrial Policy and Welfare).
- v) *Diversification of existing research strengths:* the new research initiatives described above serve as examples of the school diversifying into new emerging areas of Gender Economics and Big Data Analytics paired with Data Science. The latter is an expanding element in the School's research portfolio. The growth of the NIBS network has also expanded transdisciplinary research within the School.

Future Research Strategy

As the School looks forward into the next decade and consolidates the achievements of the REF period, the Senior Management Group has identified the following key areas for future investment

- Increase investment in **Economic Data Science** and **Data Driven Discovery**. This is an area of growth within Economics, and one in which the School is innovating through links with the Bank of England, the Office for National Statistics and private sector companies such as Experian and Fable underpin this venture. In 2021/22 the School will launch an initiative in Data Driven Discovery to visualise data and offer economic analysis for policy makers; and a postgraduate programme in Economic Data Science (MSc). This is an area for future strategic investment over the next REF period.
- The School will continue to increase its **diversity**, expanding from but not limited to the success in increasing gender diversity, to seek increased diversity in the full range of characteristic and cultures, which will further generate an inclusive and positive environment for students, colleagues and the wide community.
- Investment in career progression and placement. The School will build on its engagement

with **early career progression** through the PhD programme and ECR development, further supporting the activities of the European and US job markets.

Section 2: People

a) Diversity

Economics is an internationally diverse discipline and the School comprises a diverse set of researchers by nationality, cultural and social background, and racial characteristics. Within the submission, staff represent 18 different nationalities spanning six continents. This internationality within the School generates a diverse social and cultural research environment, and research and teaching experience for PhD students, postgraduates and undergraduates.

The School recognised that having zero female professors employed in the school at the point of submission to REF 2014 was a serious issue that needed to be addressed. In light of this, the School has worked tirelessly to reform its environment to become increasingly conducive to female progression. The school has reformed its research framework, outlined in the School's Athena SWAN submission. As a result of this work to improve female progression, the School now has five female professors. This increase in the representation of women within the professoriate has been achieved by a combination of successes in internal university promotion processes (**Barr, Montero and Sonderegger**) together with external hiring (**Rickne, Testa**). The recruitment and retention of female staff at all levels of seniority remains a priority area for the School.

In addition to significant success at professor level, the School has also substantially increased its offers to female academics on the assistant professor job market. Since the School began fully engaging with the assistant professor market in 2016, in each year it has monitored the share of females within the pool of applicants. As a result, it has ensured that: i) the shortlist of candidates for interviews at the European and North American job market events has always achieved a share of females higher than the share of females in the pool of applicants; ii) this target has also been achieved in the share of fly outs to interview at Nottingham; iii) this target has also been achieved in the composition of offers. Moreover, the School has prioritised offers to female applicants through positive action wherever possible. Accordingly, the School has increased its hiring of female assistant professors.

Despite these successes, in its Athena SWAN Bronze Award submission the School recognises the challenges, at both a discipline level and at the School level, of a lack of gender diversity. In light of this, in January 2015 the School formed an Athena SWAN Self-Assessment Team (SAT), which also serves as the School's Equality, Diversity and Inclusion (EDI) Committee. The SAT/EDI team has 9 members comprising 6 female and 3 male.

Here we focus on elements of the action plan relating to research, and the milestone achievements to date:

Achievements to date include:

- Hosting an academic conference on gender issues in Economics.
- Seeking-out and inviting academic speakers for public lectures and/or seminars who work on gender issues within the discipline.
- Requiring centre directors to consider gender balance in seminar series.
- Requiring research directors to consider gender balance in public lectures.
- Introduction of regular postgraduate research to monitor effectiveness of the action plan and, if required, to investigate reasons for any apparent ineffectiveness.
- Review of the School's postgraduate research brochure with the aim of making it more

appealing to potential female applicants by highlighting diversity of research interests in the School and increasing the visibility of females in the discipline.

- Improving the wording of job vacancy adverts ensuring that at least one female is named and available for enquiries on each advert, and systematically reviewing the wording of shortlist offering 1st and 2nd interview.
- Unconscious bias training events in School throughout the year, with all staff required to complete the training.

Ongoing and future actions include:

- Requiring conference organisers to consider gender balance in invited/accepted participants.
- Induction for all new staff to include introduction to Athena SWAN.
- Increase encouragement of female members of staff to apply for promotion earlier via the new annual review process.

b) People Development

People development is at the heart of the School's mission, from undergraduate programmes through to senior leadership. Over the REF period the School has invested both in its job market activities (as described in Section 1) while also improving career development culture and opportunities. The School has embraced the expectations and responsibilities of managers and staff in the Concordat to Support the Career Development of Researchers, of which the University is a signatory.

Investing in Junior Faculty

The School has prioritised hiring junior faculty, appointing 12 assistant professors over the past three years, with more hiring at the junior level planned for future rounds. With an increasing in hiring at the junior level occurring simultaneously with renewed investment in job market activity, in recent years the School has raised the quality of its hires at Assistant Professor level. The School increasingly hires candidates who have received extensive PhD training at top US and European departments. Recent hires include **Spencer** (Wisconsin-Madison), **Martinez** (University of California, San Diego), **Tortarolo** (University of California, Berkeley), **Poyker** (University of California, Los Angeles), **Tian** (University of California, Los Angeles), **Graziano** (Maryland), **Vizcaino** (Washington St Louis), **Hinnosaar** (Northwestern), **Rueda** (SciencesPo) and **Ruggieri** (BGS). We have also appointed several postdoctoral students supported by research grants.

Senior Strategic Appointments

The School has undertaken a number of **strategic senior appointments** to part-time positions. The appointment of **Rodríguez-Clare** brings a world-leading scholar providing strategic leadership to the GEP Research Centre. Rodríguez-Clare is a Professor of Economics at the University of California, Berkeley, Director of the Trade Research Programme at the International Growth Centre, and a research associate of the National Bureau of Economic Research. He is the Editor of the *Journal of International Economics* and Associate Editor at *American Economic Review: Insights*. Rodríguez-Clare brings extensive knowledge and experience in the field of international trade and is contributing to the School's activity through regular conference participation, PhD supervision and as a member of GEP's strategic advisory board. He served as organiser of the GEP Summer Workshop on Trade, Innovation and Multinationals, which took place in Nottingham in June 2019. Beginning in the 2020/21 academic year, Rodríguez-Clare organises a weekly reading group which considers job market papers in International Trade, allowing Nottingham and Berkeley academics and students the opportunity to discuss their job market papers in an online seminar format and then give feedback to the author.

The appointment of **Rickne** brings one of the world's pre-eminent scholars in Gender Economics to Nottingham. Rickne is Professor of Economics at the Swedish Institute for Social Research, Stockholm University, Wallenberg Academy Fellow and research affiliate at CEPR and the Stockholm China Economic Research Center. She brings unparalleled leadership to the School's research initiative in Interdisciplinary Gender Economics; she co-organised the School's first Workshop on the Economics of Gender Norms, which took place in 2020.

The appointment of **Cruces** brings a leading economist in the field of development economics and public policy. Cruces is a research fellow at J-PAL and IZA and besides her academic impact, he has a outstanding experience in the policy arena, including positions at the UK's Department for Work and Pensions, the Development Studies Division of the UN's Economic Commission for Latin America and the Caribbean and a term as Under Secretary for Development at Argentina's Ministry of the Treasury.

The appointments of **Vigier**, **Hinnosaar** and **Jensen** further add to the School's strengths in economic theory in its existing research centres, and the School has ambition to develop a theory group over coming years.

Cruces is former Under Secretary for Development, and main Adviser of the Ministry of the Treasury in Argentina, with extensive experience of working with the World Bank and other international organisations. He has been Adviser of the Uruguayan Government and has extensive experience as a consultant for the major international organisations, e.g. the World Bank and Inter-American Development Bank. He is a leading figure in development economics and adds strength in that area of the School.

Internal Career Development

The School's success in external recruitment has not come at a cost of internal promotion, but instead complements internal promotion successes. Internal promotion successes arise due to a combination of **early-stage mentoring** (each ECR in the School is mentored by a senior professor), **reduced teaching loads** for ECRs and **internal training and support**; this includes an Impact Leaders Training Programme, ECR grant-writing training programme and retreat and the School's 'Brown Bag' seminar. The latter prioritises giving ECRs the opportunity to present and receive feedback on work in progress.

The School's strategy for career development has continued to reap benefits in achieving a high rate of internal promotions. Promotions to Associate Professor during the period include **Tufano** and **Yu**. Promotions to Professor include **Albornoz** (current Head of School), **Barr** (now also Deputy Head of School), **Bougheas**, **Gathergood**, **Impullitti**, **Montero**, **Nosenzo** and **Sonderegger**.

c) Equitable Career Development

In addition to significant action to improve diversity (see Section a above), the School has undertaken a variety of actions to improve equity in opportunity for career development across **all career stages**. The School supports staff development and promotes **equality of opportunity** among staff. The School operates a workload model, which aims to equalise teaching, administrative and managerial duties fairly among staff and which creates equal opportunity for development of research projects and professional development.

New appointees including Early Career Researchers appointed internally are given **reduced teaching loads** (50% for year 1, 75% for year 2) and teaching loads are typically low with, on average, staff teaching 110 hours per year inclusive of all activities including lecturing, seminars, dissertation supervision and supervision of research students. Teaching loads allow staff to teach in

areas of expertise, especially at advanced undergraduate and postgraduate levels. Staff taking leave due to, for example, parenting leave or illness continue to accrue sabbatical entitlement and workload credits during the leave.

The research activity of each member of staff within the School is reviewed on an annual basis through a process of **Personal Development and Performance Review**. In each case, an individual's Activity Reviewer is a more senior staff member (for Assistant Professors and Associate Professors a Professor, for Professors the Head of School or Deputy Heads of School and for the Head of School the Faculty Pro Vice Chancellor). Activity reviewers appraise the research output, research activity and research development of reviewed staff and provide encouragement and suggestion as to how research and research activity can be enhanced.

The School further supports staff development through a variety of research support initiatives to which all staff have equal entitlement. These are managed by the School's Research Committee and Director of Research (Gaechter) reporting to the Head of School and Staff Meetings, and include:

- i) *Research Sabbaticals*: The School has a one Semester in six eligibility, with the option to augment this with additional externally funded leave, and/or through the support of one of the Research Centres (pro rata for PT staff). Those granted **sabbaticals** may bid for financial support to assist with planned activities during their leave, with sabbatical funding approved in all cases during the REF period. The School encourages those on leave, and younger staff in particular, to visit other institutions (especially those with established reputations in the relevant research field).
- ii) *Funding for Conference Participation*: Bids for conference funding are funded with preference given to those presenting at higher calibre international conferences, and to **younger members of staff seeking to gain experience** and develop their networks of research interactions.
- iii) *Senior Academic Visitors Programme*: The visitor will normally deliver a seminar, or participate in a workshop organised to coincide with the visit, but the key rationale for the programme is to provide an opportunity for informal networking between School researchers and visitors. During the REF period, the School has hosted 34 senior academics, including multiple visitors from North American institutions including CalTech, Harvard, MIT, Yale, Princeton, Chicago and Northwestern with, for example, current or former editors of *American Economic Review* and *Econometrica* among their number.
- iv) *Personal Research Accounts*: Each member of staff is entitled to a Personal Research Account (PRA) to fund research-related activities other than those financed by the School's Research budget. In addition to periodic contributions from the School, a proportion of the overheads from research grants won by staff are paid into PRAs to provide incentives for research income generation and fund further research-related activity.

Section 3: Income, Infrastructure and facilities

a) Income

Throughout the REF period, the School has continued to receive substantial income from its major research investments and has also developed new funding streams. At the School level research income generation is supported by the School Research Committee and the School Research

Officer; at the Faculty level income is supported by the Centre for Advanced Studies. The School views the application for, and receipt of, research income as an essential component in the research production function. At the same time, the School takes a strategic approach to research funding applications, recognising opportunities in the intersection of the School's research strengths and the thematic priorities of funders.

Income generation is supported by a high-quality Research Development organisation infrastructure. The Faculty of Social Science Research and Knowledge Exchange team includes five specialist Research Development Managers who hold portfolios of research development activity defined by topic and funder specialisms. The School hosts two Senior Research Officers who contribute to bid development, collaboration agreements and contracting. Research grant strategy is overseen by the School's Director of Research (**Gaechter**), and is supported by colleagues on the Research Committee. Expertise is strengthened by experience in past or present service on ESRC Grant Assessment Panels (**Albornoz, Mizen**).

Income generation is further supported through collaboration with external HEIs and research partners. Grants won over the period have involved external collaborations with the Bank of England, Financial Conduct Authority, Financial Services Providers (including Lloyds Banking Group, Barclays Stockbroking and Argus Analytics). Grant applications also draw upon shared resources.

This central team within the faculty raises awareness of research funding opportunities and provides early-stage advice. The School then operates an internal peer-review system for initial grant ideas, which aims to sift potential grant applications at the early stage and provide feedback on the grant proposal from inception. Further peer-review is undertaken at the School level prior to peer-review at the Faculty level prior to submission.

Over the REF period the School has achieved a research income spend among staff returned to the Economics and Econometrics unit of assessment of over £5.1m, of which more than 50% has been raised from non-UKRI sources. This diversification of income streams improves sustainability by reducing reliance on UKRI (in particular ESRC) and offers a degree of insurance in a changing and uncertain research funding environment. The School also achieves a high degree of diversification in its staff base involved in raising research income. During the REF period, awards have been made to 24 individuals within the unit, more than two-thirds of the number of individuals returned by the unit. This further helps to improve the sustainability of research income within the School.

Highlights within the School's portfolio of research grants held during the period, the majority of which outlast the REF 2021 submission date include:

- **ESRC Large Grant** (£2.3m) to support the ongoing work of the Network for Integrated Behavioural Science, following-on from an **ESRC Centre Grant** (£3.5m). The NIBS research programme, drawing on Economics and Psychology and at the cutting edge of interdisciplinary Behavioural Science, aims to advance understanding of consumer behaviour and contribute to high impact applications through collaboration with a range of non-academic partner organisations.
- **European Research Council Advanced Investigator Grant** (£1.9m) 'Putting Strong Reciprocity into Context: The Role of Incentives, Social Norms, and Culture for Voluntary Cooperation', awarded to **Gaechter**.
- **Volkswagen Stiftung Grant** (£800k) 'The Rise of Populist Parties in Europe: The Dark Side of Globalisation and Technological Change?', awarded to **Facchini, Testa** and external collaborators.
- **ENEL Foundation Research Grant** (£900k) 'Value Added in Motion: The Future Geography of Production, Migration and Energy', awarded to **Facchini** and external

collaborators.

- **Global Integrity Anti-Corruption Evidence Programme (£350k)** ‘International Anti-Corruption Laws and Local Social Norms: Interactions and Implications for Policy’, awarded to **Barr** and collaborators.
- **UKRI ESRC Standard Grants** on the topics of:
 - ‘Measuring the Impact of Brexit on UK Investment, Productivity, Sales and Employment’, awarded to **Mizen** (£836k)
 - ‘Understanding and Explaining Management Practices to Promote Higher Productivity in UK Businesses’, awarded to **Mizen** and other Investigators at the National Institute for Social-Economic Research (£1.1m)
 - ‘Accumulating to Choose, but Accumulating What? Drift Diffusion Modelling of Economic Preference’, awarded to **Starmer** (£650k)
 - ‘Migration and The Reshaping of Consumption Patterns’, awarded to **Facchini** and external collaborators (£490k)
 - **Mizen** UKRI Covid-19 award to support research into the business impact of Covid-19 (£804k)
 - **Starmer** UKRI Covid-19 award for the CIVIC Project: ‘Predicting Covid-19 Impact on Vulnerable Individuals and Communities Via Health, Deprivation and Loyalty-Card Data (£292k)

The development of the impact cases study portfolio has also been supported by awards from the **ESRC Impact Acceleration Account** (on which see Section 1e above for further details).

b) Physical Infrastructure and Facilities

The School is housed in a central location on University Park Campus, offering excellent access to campus facilities and teaching and research locations. The School has a number of infrastructure advantages, including:

- Signature location in the **Sir Clive Granger Building**, in honour of the former member of staff within the School winner of the 2003 Nobel Memorial Prize in Economic Sciences.
- Extensive staff office facilities, offering **individual staff offices** to all staff members including postdoctoral research fellows and teaching fellows.
- The School benefits from housing all staff in a **single building**, creating a connected and convivial setting for collaborative research.

The major infrastructure investment over the period has been the expansion of the School’s **CeDEx lab size and the upgrade of technology**.

a. CeDEx at Nottingham has the use of two purpose built, dedicated decision research **labs** - one in the School of Economics on University Park Campus and one in the Nottingham University Business School (NUBS) on Jubilee Campus. In combination, this offers 72 computer terminals for use by subjects (32 in Economics and 40 in NUBS) operating on Windows Systems and installed with standard software, ready to run experiments in Qualtrics, Lioness, different versions of zTree or any other software required. This capacity increased from approximately 40 terminals available at the time of submission to REF 2014. As well as the expansion of physical infrastructure, there has been a very substantial increase in the use of online platforms for data gathering (together with development of programming technologies and other infrastructure to support it – e.g. most recently development of electronic online subject payments).

b. These facilities provide **opportunity for income generation** in addition through the hiring-out of the lab facility. The facility is used by researchers from other HEIs on a chargeable basis, as well as external consultancies and the third sector. Moreover, CeDEx also offers a database of approximately 3,000 volunteer subjects willing to be invited to

experiments. CeDEX operates to strict experimental protocols, including of course obtaining ethical approval prior to any experiment.

c. To support the continued expansion of the CeDEX lab portfolio, Economics and NUBS employ a **full-time Lab Manager** who is also available to offer expert advice and assistance to those running (or thinking of running) experiments. This can include programming experiments, guidance on minimum subject payments and help with ethical approvals and protocols for research with human subjects and use of data.

d. The Decision Maker Panel has a **dedicated lab** with 22 workstations to support staff and a **full-time Manager** who recruit and retain senior executives from UK firms for the Decision Maker Panel online monthly survey.

c) Impact Strategy 2014 - 2020

Impact strategy has focused on prioritising and resourcing impact-focused research within the School's research portfolio. Since 2014, research impact achievements have been recognised in the School's promotion and pay award structure at all levels, incentivising staff to prioritise research impact activity alongside other research activities. A major strategic investment in research impact at Nottingham is the ESRC Impact Acceleration Account (ESRC IAA). Running since 2014, the ESRC IAA aims to build knowledge exchange activities and impact through social science. The ESRC IAA has been awarded a further £1.3 million in follow-on funding, and a further £100,000 of NPIF funding.

The ESRC IAA operates three key programs from which the School has benefited

- The Impact Leaders Programme to support and develop academics in strategic impact leadership roles. During the REF period academics from within the School of Economics have undertaken the extensive programme of over 80 hours of training and investment of £5k per researcher per year in new research impact initiatives. All Impact Case Study authors from the School have undertaken the programme.
- Mode A Fund: enabling grants to support partnership development and network development for KE. Grants available of up to £2.5K on an open call basis.
- Mode B Fund: for pilot projects or early project development to enable, for example, proof-of-concept work with an external partner. Grants available of up to £10K on an open call basis.
- In addition, the ESRC IAA operates an Interdisciplinary Knowledge Exchange Fund, which supports small grants on an open call of up to £10k to support multidisciplinary collaborative projects and an Impact and Knowledge Exchange Postdoctoral Fellowship Scheme, facilitating 6-month placements of postdocs at Nottingham.
- For example, the IAA initially supported the DMP as a pilot project with £60k of Mode B and Strategic funding enabling us to secure £3.4m of ESRC and other funding. This is a good example of how IAA provided a seed corn fund to support the growth of major research projects.

All case studies submitted by the School have received substantial investment from the ESRC IAA.

- **Albornoz** received funding to gather research on the impact of pedagogical content knowledge and ongoing mentoring on student learning in science in Latin American schools. Funding also facilitated the development of stakeholder relationships to work with other Latin American schools to expand research and deliver higher and longer-term impact.
- **Gathergood** received funding for a 6-month research assistant position to undertake background research on consumer credit policy in the United Kingdom and produce outputs translating academic research into policy briefings and consultation submission.
- **Mizen** received multiple funding injections to support the work on DMP and broader projects on productivity. A first funding injection under the title 'Evaluating the Impact of Brexit: A

New Survey, Research and Public Data' supported the creation and incubation of the DMP. A second injection under the title 'Investigating the Impact of the EU Referendum Result on Economic Uncertainty and Firm Decision Making through A Bespoke Survey' supported the expansion of the DMP and was critical for receiving matched funding by the Bank of England.

ESRC IAA funding is also contributing to the School's ongoing strategy to develop a future portfolio of Impact Case Studies.

- **Barr** received funding to generate new insights into the role of individual values and social norms in financial decision-making in sub-Saharan Africa. These insights will inform Financial Sector Deepening's (and others') practices and intervention design. 1 project near completion, 3 more at the design stage.
- **Mizen** received funding for the Decision Maker Panel pilot project. This has had substantial additional grant income from ESRC and other sources and has measured uncertainty around Brexit and Covid-19. In relation to Brexit, the results have been used extensively by the Bank of England's Policy Committees including in speeches, official publications and their assessment of the Withdrawal Agreement presented to Parliament (Nov 2018) and reported in *The Financial Times*, *The Wall Street Journal*, *Fortune*, *The Sunday Times*, *The Times*, *The Independent*, *The Telegraph*, *The Guardian*, *The Economist* and *Harvard Business Review*. In relation to Covid-19, the data have been fed to the Policy Committees of the Bank of England, Government Departments such as HM Treasury, BEIS, the Home Office, the Department for Transport, and to COBRA and 10 Downing St. They were used in an international meeting of central bank governors at Jackson Hole to illustrate the uncertainty facing UK and US businesses.
- **Starmer** received funding for two projects spanning Behavioural Science and Development Economics. A first project in collaboration with manufacturing firms in the midlands, 'Boosting Productivity through Reciprocity and Well-Being in A Firm', draws upon behavioural science research that shows that the majority of people are motivated to behave reciprocally towards others. A second project, 'Measuring Social Integration and Community Cohesion in Rural Pakistan', focuses on the fact that, due to geographical location and socioeconomic conditions, youth populations in Northern Pakistan are at special risk of radicalisation. This project comprises a field study that empirically and quantitatively monitors changes in youth integration and social cohesion around the first, pilot community centre in Pakistan.
- **Gathergood** regularly engages with the consumer finance industry, regulators and the third sector. During the REF period, his engagements have included the NEST Insight Annual Conference 2019 'The Lived Experience of Saving', The UK Finance Data Ethics Conference 2019 'Data Ethics and Retail Banking' and the UK Finance Later Life Lending Conference 2019 'Behavioural Economics of Housing and Ageing'. Gathergood was shortlisted (final 3) for the 2016 ESRC Prize for Outstanding Impact on Public Policy for his work on the regulation of payday lending. His research with the Financial Conduct Authority led to a price cap for payday loans – protecting more than four million payday loan customers from extortionate interest fees.

Selection of Impact Case Studies

The School began the REF period with a selection of seven potential Impact Case Studies, all of which were developed and supported during the early part of the REF period. Initial outline case studies were evaluated by Faculty panels, involving reviewers from other disciplines within the Faculty of Social Science. The Faculty conducted ongoing periodic reviews during the REF period to progress the portfolio of case studies.

Selection of case studies was made on the basis of reviewer scores from the Faculty

panels. This provided a high degree of objectivity in the selection process, minimising potential bias and conflict of interest, which may have arisen under an internally governed process.

Open Research, Research Ethics and Integrity

Establishing the School's **Research Ethics** Committee (REC). At the University level, governance requires all staff and students who are engaged in research to maintain the highest standards of integrity in the conduct of research. The University's principles for research ethics are integrated into the Code of Research Conduct and Research Ethics. In addition, the School has established an internal REC for the purpose of further bolstering research ethics and integrity oversight.

School protocols ensure that research must undergo ethical review and receive approval before work can begin where research involves the participation of human subjects, their data and/or their tissue. School protocols go beyond existing ESRC guidelines.

Providing increased training and awareness of **Research Integrity**.

In accordance with University policy, since 2018, the University Research Ethics Committee requires that all new doctoral students receive training in Research Integrity. The Researcher Academy offers training to support Schools and Researchers in meeting this requirement. All staff within the School are also required to undertake research integrity training via an online course, which is designed to strengthen researchers' awareness of their own responsibilities and accountability when conducting research, and provides guidance on what to do should things go wrong.

Research from the School of Economics has contributed to encouraging a culture of reproducibility. Tufano, together with co-authors, co-edited an *Economic Journal Features Special Issue* on 'The Research Reproducibility Crisis and Economics of Science'. Researchers from the School have also set examples for the discipline in publishing replications of their own work in new data. For example, Gathergood published a companion paper to his main paper 'How Do Individuals Repay Their Debt? The Balance Matching Heuristic' published in the *American Economic Review* that replicated the results from that paper in a sister dataset. The replication study was published as 'How Do Americans Repay Their Debt? The Balance Matching Heuristic', published in *Economics Bulletin*.

4. Collaboration and contribution to the research base, economy and society

The School's contribution to Economics as a discipline takes a variety of forms beyond the authorship of original research published in internationally renowned journals in Economics, Finance and Behavioural Science. The School contributes to research development in the discipline more generally through staff delivering lectures and seminars externally and participating in conferences and workshops, plus by the School hosting regular seminars, workshops and conferences, by its staff undertaking editorial and advisory service at academic journals, on scientific committees and on steering groups. Staff regularly undertake research visits at other institutions, plus actively contribute to external PhD programmes by providing short-courses or through master classes and examining.

In addition, the School supports research impact activities by a number of additional means and resourcing initiatives. Researchers are supported by a full-time dedicated Research Impact Officer

who provides all-round support in the creation of research impact networks, facilitation of interaction and meetings, evidence collection and other activities. The School Research Committee also funds the use of research assistants for activities related to the generation of impact, in addition to the funding made available via the ESRC IAA.

Research Network Building

GEP Research Network

GEP continues to host one of the most active workshop and conference programmes in international trade within Europe, drawing on a network of internal and external fellows and collaborating with a broad range of institutions and professional bodies.

During the REF period, GEP hosted the following workshops and conferences, which include **collaboration with over 15 HEIs and research groups** from across the world:

- Firm and Technology Dynamics: A Global Perspective (Jun 2014)
- China's Growth in the Global Economy (Nov 2014)
- Firm Heterogeneity: Implications for Aggregate Outcomes (Jan 2015)
- [Current Issues in International Economics and Open-Economy Macroeconomics](#) (Feb 2015)
- [Festschrift Conference for Professor Sir David Greenaway](#) (Jun 2015)
- [Firm and Technology Dynamics: A Global Perspective](#) (Nov 2015)
- [China and the Global Economy](#) (Nov 2015)
- [Asian Economic Integration and Development](#) (Feb 2016)
- [Dynamics, Economic Growth and International Trade](#) (DEGIT) (Sept 2016)
- [China and the Deglobalising World Economy](#) (Nov 2016)
- [Economic and Financial Integration in Asia and Beyond](#) (Feb 2017)
- [Preferential Trade Agreements - Lessons for Post-Brexit Britain](#) (Mar 2017)
- [Imports and Global Value Chains Festschrift conference for Professor Chris Milner](#) (Jun 2017)
- [Conference in Honour of Professor Sir David Greenaway: Public Policy](#) (Sept 2017)
- [Migration and the Reshaping of Consumption Patterns: Economics and Politics](#) (Sept 2017)
- [Trade Integration in Historical Perspective](#) (Sept 2018)
- [VW Foundation Workshop](#) (Apr 2019)
- [International Trade Workshop](#) (Jun 2019)
- [InstED Institutions Trade and Economic Development Conference](#) (Sept 2019)
- [1st International Workshop](#) (May 2020)
- The Dynamics of [Trade Workshop](#) (Jun 2020)

In addition, GEP also continues to host an annual postgraduate conference, which in 2021 will be in its 20th year. In June 2015 GEP also hosted a Festschrift Conference for Professor Sir David Greenaway, Founding Director of GEP. GEP hosts six Lectures Series, Nottingham Globalisation Lecture, The World Economy Annual Lecture, The World Economy Annual Asia Lectures, The World Economy China Lecture, Nottingham Lectures in International Economics and the Boustead Globalisation Lecture.

GEP engages diverse, global audiences through its lecture series presented at all three campuses of the University – in China, Malaysia and the UK. Highlights include:

Nottingham Globalisation Lectures:

- **Charles Clarke**, Former Home Secretary on "[How best can we meet the international economic and security challenges of our time?](#)" (Oct 2014)
- **David Smith**, Economics Editor, The Sunday Times - "[After the crisis: How Britain's adjusted and how it has not](#)" (Dec 2014)

- **Martin Wolf**, Associate Editor and Chief Economics Commentator, *The Financial Times* - "[The Shifts and The Shocks](#)" (Feb 2015)
- **Sir Peter Kendall**, Chairman, Agriculture and Horticulture Development Board (AHDB)- "[British Agriculture: Sunrise Industry](#)" (Mar 2015)
- **Michael Jacobs**, Senior Adviser on International Climate Change Policy at l'Institut du Développement Durable et des Relations Internationales (IDDRI), Paris on "[Crunchtime in Paris: the political economy of a new climate change agreement](#)" (Oct 2015)
- **Martin Wolf**, Associate Editor and Chief Economics Commentator, *The Financial Times* on "[The challenges of China's transition to a "new normal"](#)" (Feb 2016)
- **David Norgrove**, Chair, Low Pay Commission on "[The past and future of the minimum wage](#)" (Jan 2017)
- **Martin Wolf**, Associate Editor and Chief Economics Commentator, *The Financial Times* on "[The rise of economic populism](#)" (Feb 2017)
- **Anna Soubry**, MP for Bournemouth on "[Brexit: where are we now?](#)" (Oct 2018)
- **Martin Wolf**, Associate Editor and Chief Economics Commentator, *The Financial Times* on "The future of US-China relations" (Mar 2019)
- **Martin Wolf**, Associate Editor and Chief Economics Commentator, *The Financial Times* on "[The challenge of reaching global net zero by 2050](#)" (Mar 2020)

The World Economy Annual Lecture:

- Philippe Aghion, Robert C. Waggoner Professor of Economics, Harvard University '[What Do We Learn from Schumpeterian Growth Theory?](#)' (Jun 2014)
- Jeremy Greenwood, University of Pennsylvania '[Why doesn't technology flow from rich to poor countries?](#)' (Jun 2015)
- Gene Grossman, Princeton University '[Balanced neoclassical growth](#)' (Sept 2016)
- Richard Baldwin, Professor of International Economics, Graduate Institute of International Studies, Geneva '[Misthinking of anti-globalisation](#)' (Jun 2017)
- Stephen Redding, Princeton University. '[The making of the modern metropolis: evidence from London](#)' (Sept 2018)
- Giovanni Maggi, Yale University. '[Are trade agreements good for you?](#)' (Sept 2019)

The World Economy Annual Asia Lectures:

- [Professor Euston Quah, Professor of Economics, Nanyang Technological University, Singapore](#) '[Pursuing Economic Growth in Asia: The Environmental Challenge](#)' (Feb 2014)
- Professor Hans Genberg, South East Asian Central Banks (SEACEN) Research and Training Centre, "Implementing Macro-prudential Policies: Challenges, Pitfalls and Way Forward" (Feb 2015)
- Norman Loayza, Lead Economist, Development Economics Group, The World Bank, "Informality and the Process of Economic Growth" (Feb 2016)
- Innwon Park, Korea University "Best Practices for Regional Trade Agreements: An Application for the Asia-Pacific Region" (Feb 2017)

The World Economy China Lecture:

- Professor Peter Neary, Professor of Economics, University of Oxford '[Superstar Firms in the Global Economy](#)' (Nov 2014)
- Professor Zheng (Michael) Song, Professor of Economics, Chinese University of Hong Kong 'Institutional Foundation of China's Growth' (Nov 2015)
- Professor Mathias Thoenig, HEC Losanne, 'Natural Resources and Civil Conflicts' (Nov 2016)
- Professor Junsen Zhang, Chinese University of Hong Kong, 'Does foreign investment liberalization enhance women's economic independence? Macro evidence from urban China' (Nov 2018)
- Professor Justin Yifu Lin, Peking University 'The Rise of China and the Belt and Road initiative' (Nov 2019)

Nottingham Lectures in International Economics:

- **Professor Christian Dustmann**, University College London: Three lectures on '[Immigration](#)' (2014)
- **Professor Giancarlo Corsetti**, University of Cambridge: Three lectures on '[International dimensions of monetary policy](#)' (2015)
- **Professor Thierry Mayer**, Sciences-Po: Three lectures on '[Gravity and the welfare gains from trade](#)' (2016)
- **Professor Paola Conconi**, Université Libre de Bruxelles: Three lectures on '[The organisation of firms in a global economy](#)' (2017)
- **Professor Thierry Verdier**, Paris School of Economics: Three lectures on '[Globalisation, institutions and cultural evolution](#)' (2018)]
- **Professor Andrés Rodríguez-Clare**, University of California at Berkeley: Three lectures on '[Welfare effects of international trade and industrial policy](#)' (2019)

Boustead Globalisation Lecture:

- **Professor Christine Ennew**, Provost and Pro-Vice-Chancellor, University of Nottingham Malaysia Campus, 'The Future of International Education' (Feb 2015)
- **Mansor Ibrahim**, Dean, Graduate School of Studies, INCEIF (The Global University of Islamic Finance), 'Islamic Finance and Resilience of the Financial System' (Feb 2016)
- **Cassey Lee**, Yusof Ishak Institute (ISEAS), Singapore, 'SMEs and ASEAN Economic Integration' (Feb 2017)

NIBS Research Network

As an ESRC-funded research Network, **NIBS** is inter-institution and transdisciplinary by design. Collaboration between participating institutions and partner bodies is at the heart of NIBS activity. In addition, over the REF period NIBS has convened a wide variety of events, including a broad range of conferences and workshops, featuring the following:

- [NIBS Spring Workshop \(2014\)](#): Household Financial Decision Making and Behaviour, joint with Carnegie-Mellon University, including a keynote address by George Loewenstein
- [NIBS Autumn Workshop \(2014\)](#)
- [NIBS Spring Workshop \(2015\)](#): Behavioural Science and Policy, joint with the Financial Conduct Authority and Competition and Markets Authority. Including a keynote address by Colin Camerer
- Link to [Event mini-site](#)
- NIBS Autumn Workshop (2015):
- [NIBS Spring Workshop \(2016\)](#)
- [NIBS Autumn Workshop \(2016\)](#)
- [Workshop on Social Preferences and Incentives \(Nov 2016\)](#)
- [NIBS Spring Workshop \(2017\)](#): Behavioural Science & Public Policy Workshop, joint with the Financial Conduct Authority and Department for Business, Innovation and Skills
- [NIBS Autumn Workshop \(2017\)](#)
- [A Conference in Honour of Vernon L Smith](#) Awarded a Nobel Prize in Economic Sciences in 2002 (Dec 2017), including a keynote address by Vernon Smith
- [NIBS Autumn Workshop \(2018\)](#)
- [CRIBS Annual Symposium 2018 on “Preferences, Market and Society” \(Jun 2018\)](#)
- [“Social Integration, Group Cohesion & Community Resilience” Workshop \(Dec 2018\)](#)
- [NIBS Autumn Workshop \(2019\)](#)
- [NIBS Autumn Workshop \(2020\)](#) Including a keynote address by Stefano DellaVigna

Development of the Discipline

Members of the School have undertaken scientific advisory work for funding bodies, professional

societies, research institutions (as members of scientific advisory panels or through participation in with institutional reviews) and by serving on professorial appointment committees.

Associate Editorships held by colleagues in the School include: Bulletin of Economic Research (Sonderregger, 2019-present; De Fraja, 2006-present); *Economia* (Cruces); *Econometric Reviews* (Trapani); *Econometric Theory* (Marsh); *Economic Letters* (Harvey); *Economics and Politics* (Facchini, 2017-present); *Economics of Education Review* (De Fraja, 2006-present); *International Economics* (Facchini, 2015-present); *Journal of the Royal Statistical Society Series A* (Harvey, 2013-16); *Journal of Time Series Econometrics* (Leybourne, 2014-present); *Management Science* (Gaechter, 2011-17); *Review of International Economics* (Facchini, 2013-present); *Southern Economic Journal* (De Fraja, 2014-present)

Funding Bodies. Colleagues have undertaken reviewer roles for funding bodies including AHRC (Gathergood); Austrian Academy of Science (Gaechter); Bank of England (Mizen); British Academy (Barr; Nosenzo; Starmer; Facchini; Gathergood; Cubitt; Gaechter; Renner); EPSRC (Gathergood); ESRC (Barr; Nosenzo; Starmer, 2015-17; De Fraja; Montero; Jul 2010-present; Mizen; Cubitt; Gaechter; Tufano, Albornoz, 2008-present); Israel Science Foundation (Gaechter); Italian Research Council (De Fraja); Leverhulme Trust (Barr; Starmer; De Fraja; Facchini; Gathergood; Mizen; Gaechter); Medical Research Council (Cubitt); National Centre for Research Methods (Barr); National Science Foundation (US) (Harvey; Nosenzo; Starmer; Rustagi; De Fraja; Facchini; Gathergood; Cubitt; Gaechter; Rustagi; Jensen); Social Science and Humanities Research Council (Canada) (Facchini; Mizen; Cubitt; Gaechter); Swiss National Science Foundation (Nosenzo; De Fraja; Montero; Gaechter; Renner); Volkswagen Foundation (Gaechter), Millennium Science Initiative (Albornoz).

Research Institutions and Appointment Committees, including Bank of England (Mizen, 2015 – consultant and academic panel member); Bonn Graduate School of Economics (Gaechter, 2010-present: Scientific Advisory Board); Competition and Markets Authority (Gathergood, 2015-16); Financial Conduct Authority (Nosenzo; Gathergood, 2018-19; 2014-17); International Finance and Banking Society (Mizen, 2017 & 2019); Economic Statistics Centre of Excellence (Mizen, 2017-, conference committees, management group); Money Macro and Finance Society (Mizen, 2016-, chairman and trustee); Office for National Statistics (Mizen, 2018-, Fellow, Economic Experts Working Group) National Evaluation and Prospective Agency (ANEP) (Spain) (Albornoz, 2016-present); Organisation for Economic Cooperation and Development (Facchini, 2016); POLECONUK (Testa); University of Cologne (Gaechter, 2010-15: Scientific Advisory Board)

PhD External, PhD Training and Assessment: including European University Institute (Facchini; Mizen); London School of Economics (Testa; Mizen; Gaechter, 2018; Leybourne, Albornoz, 2019, 2020); Paris School of Economics (Facchini); Universidad Autonoma de Barcelona (Licandro, 2015); University of Bristol (Leybourne); University of Cambridge (Leybourne); University College London (Facchini; Gaechter, 2015); University of Edinburgh (De Fraja 2019; Gaechter, 2017); University of Essex (Facchini); University of Oxford (Mizen; Cubitt, 2015; Leybourne); University of Warwick (Starmer; Mizen; Albornoz); Bank of England (Mizen, 2015-present); World Bank (Albornoz, 2015-16; Renner)

Esteem Indicators

External fellowships awarded to colleagues include Abdul Latif Jameel Poverty Action Lab (Cruces, 2020-present); Academy of Social Sciences (De Fraja, Lee, Mizen, 2019-present); Center for Development Research –Bonn University (Rustagi, 2015-present); Center for Economic Performance –LSE (Impullitti, 2018-present); Centre for Research & Analysis of Migration –at UCL (Facchini, 2010-present); Centro Studi Luca D’Agliano (Testa, 2009-present; Impullitti, 2015-present); CEPR –International Trade and Regional Economics (Impullitti, 2020-present; Facchini,

2013-present); CEPR (Albornoz, 2020-present; Hinnosaar, 2019-present; Licandro; De Fraja, 1993-present); CESifo (Impullitti, 2011-present; Facchini, 2009-present; Gaechter, 2002-present; Licandro); Institute of Government & Public Affairs –at University of Illinois (Facchini, 2007-present); IZA Institute of Labor Economics (Facchini, 2011-present; Cruces, 2010-present; Gaechter, 2003-present); Journal of Economics (Fellow, Leyborne, 2018- present); Novo Tempus –Paris, Pantheon-Sorbonne (Jensen); Journal of Time Series Analysis (Distinguished Author, 2020-present); Office for National Statistics (Mizen, 2018-present); Royal Society of Arts (Mizen, 2019-present); STICERD – LSE (Testa, 2001-present)

External Funding Awards achieved by colleagues (in addition to UKRI and ERC) include

Bank of England & Stanford University (Mizen, 2017-21); British Academy – Small Grant (Yu); British Academy (Gaechter, Aug 2018 – Jul 2020); British Academy / Leverhulme Small Research Grant (Nosenzo, 2014 & 2016; Facchini, 2016-17; 2016-17; Sonderegger, 2018); Center for Advanced Study in the Behavioral Sciences –at Stanford University (Rustagi, 2019); Economic Statistics Centre of Excellence (Mizen, 2016-20); ENEL Foundation (Facchini, 2013-16); Jacob Wallenberg Foundation – Young Researcher Award (Rickne, 2015); Marie Curie Fellowship (Starmer, Oct 2015 – Sept 2017); National Centre for Scientific Research (France) (Jensen, 2012-16); Netherlands Organisations for Scientific Research - Science for Global Development (Facchini, 2011-15); Swedish Research Council (Rickne, Jan 2019 – Dec 2021 & Jan 2013 – Dec 2015); Volkswagen Foundation (Testa; Facchini)