

Annual report for the Centre for Competition Policy 1 January – 31 December 2016

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This report is an abridged version of the Annual Report 2016 submitted to the University of East Anglia in February 2017

The objective of CCP, as stated in its constitution, is to undertake high quality independent academic research into competition and regulation policy and its impact on companies and others. Its output is in the public domain and contributes both to the development of policy and to understanding business responses.

1 Introduction

The Centre for Competition Policy (CCP) is a joint venture between the University of East Anglia's (UEA) School of Economics (ECO), the School of Law (LAW), Norwich Business School (NBS) and the School of Politics, Philosophy, Language and Communication Studies (PPL). CCP has established itself as a leading internationally recognised research centre focused on competition policy and regulation.¹ Thorough enquiry in this field is necessarily multidisciplinary. In its research, CCP draws on models, theories and techniques from economics, law and political science. Economic analysis provides an understanding of how consumers, firms and markets operate, of when markets fail for lack of competition, of techniques which might be adopted to regulate behaviour and of the consequences of such policy interventions. Legal analysis is necessary to ensure the legislature and the courts establish and develop sound rules with which firms should comply, and which regulatory agencies can enforce and operate within. Political science provides an understanding of the design and development of policies, and into the bodies and institutions that implement them. Our research applies each of these disciplines individually and together to achieve real-world policy relevance without compromising academic rigour.

By the end of 2016, CCP had 35 faculty members, up from 31 the year before, six Research Associates, up from 3 the year before and 19 research student members, up from 18. Together with two administrators, CCP consists of 68 members, all of whom either work or study at UEA. During the year, CCP members published 37 journal articles and book chapters and 14 working papers. CCP continues to disseminate its research to both academics and practitioners. We organise both a weekly research seminar which had 35 meetings during the year and an annual open summer conference which for the third year running attracted more than one hundred delegates. Our research findings were presented externally to academics (108 occasions) and practitioners (45 occasions). Our research was highlighted in nine responses to public consultations and two requests for evidence, and formed the basis for 22 blog posts. Members were active in both new digital media, where our Twitter account has 2370 followers and in more traditional media where researchers were quoted 41 times.

Research at CCP has been funded through a number of grants from the UK Research Councils, including the Arts and Humanities Research Council (AHRC) and the Economic and Social Research Council (ESRC), as well as contract research carried out for UK and international organisations. The latter include the European Union's Directorate General (DG) Competition and DG Justice, the Centre on Regulation in Europe (CERRE), the UK energy regulator Ofgem, the Competition and Markets Authority (CMA), the Office of Rail and Road (ORR), Which? and Anglian Water. Core funding is also obtained through our subscription membership scheme which currently has six public sector members. As in past years, CCP has undertaken a small amount of bespoke training, an area which will grow in 2017.

¹ Competition policy provides a broad framework for the manner in which firms can interact, while regulation sets industry-specific rules. Markets with many alternative suppliers typically provide consumers with products and services they want at the best possible prices. In such markets, competition policy provides little restraint on business behaviour, the exception being on cartel practices, which are nearly always harmful. When fewer firms participate in a market, however, it is appropriate to constrain a range of anticompetitive business practices. Competition law provides the general framework for this. In cases where entry and competition cannot erode market power, at least in the medium term, policy options include direct (sectoral) regulation of the firms' behaviour.

While we have exceeded the majority of our key performance indicators, in several cases significantly (for a full list see appendix 5.1 below), we have come up short in two areas: working papers and policy briefs for published papers. The latter is still a work in progress and we hope to report significant progress on this KPI in 2017.

Finally, in July, the Centre was reviewed very favourably by the University. The opening comment of the report stated “CCP is an excellent research centre, as demonstrated by its exceptional research success to date, including excellent outputs, impact, reputation, added value, and support of PhD students and research assistants”.

2 Activities 1 January to 31 December 2016

2.1 Staff

CCP continues to grow in membership. This year we have been joined by faculty members Dr Tola Amodu (LAW), Dr Sally Broughton-Micova (PPL), Dr Sabine Jacques (LAW), Professor Kai-Uwe Kühn (ECO), Dr Lily Samkharadze (NBS), and Dr Jiwei Zheng (ECO). During the same period, Dr Sang-Hyun Kim and Dr Rob Topinka have left to take up posts elsewhere. This takes the current number of faculty members from UEA Schools to 35. Breaking these down by the main UEA Schools, CCP has 13 members from ECO, 8 from LAW, 8 from NBS and 5 from PPL, ensuring that all the disciplines are well represented. The growth in membership has also led to greater diversity in the research interests of CCP members.

CCP faculty members are heavily involved in activities external to but relevant for CCP. Several are members of peer-review panels of the UK funding bodies and others serve on various advisory boards of research centres, public sector bodies and NGOs. Notably, Fletcher is a non-executive director of the CMA and FCA, Waddams a non-executive director of Ofwat, Lyons and Ormosi are members of the CMA’s Academic Panel, and Lyons is a member of the European Commission’s economic advisory group on competition policy.

During the year, as a result of a new research grant, we were joined by three Research Associates, Elizabeth Errington, Dr Noel Longhurst and Glen Turner, and Dr Sofia Izquierdo Sanchez left to take up a post elsewhere. This takes the number of Research Associates on longer term contracts to six. In addition, a number of research students undertook various ad hoc research work.

CCP Associate Members continue to engage actively with CCP. Bennato, Garrod and Mantzari were involved in various research applications. Bennato is involved in a current research project. Cadman, and Garrod and Olczak published papers in CCP’s working paper series, and Cadman contributed several blog posts.

In addition to academics and policy makers visiting the centre for one to two days in connection with our seminar series, we were joined by two long-term visiting researchers in 2016; Julie Clarke from Deakin Law School, Deakin University and Dong Myong Kim from the Korean FTC. Finally, we were joined by four new PhD students, while three of the PhD students associated with CCP obtained their doctorate.

2.2 Funding

Funding is essential for CCP to carry out its planned research and engagement. CCP brought a total of £283k into the University through its various activities: grants (27%), contract research (51%), knowledge exchange (10%), membership scheme (10%) and conference fee income (3%)

Grants

Success in research grant applications is crucial to CCP’s sustainability; such funding allows its academics to pursue their research passions while also raising the Centre’s reputation and delivering overheads into its budgets to cover some of its running costs.

In addition to existing projects, CCP has been awarded a number of new research contracts in 2016, and some contracts awarded in 2015 have started in 2016. An Innovate UK Knowledge Transfer Partnership grant, awarded to Waddams as Principle Investigator (PI) and Bokhari in 2015, came into effect in April 2016. The industry partner in the grant was Cornwall Energy, a Norwich-based energy firm. Due to issues outside the control of the PI and CCP, this project had to be abandoned in August 2016. CCP members Waddams (PI), Deller, Errington, Fletcher and Harker, together with Tom Hargreaves were awarded a grant by the UK Energy Research Centre (UKERC) to carry out research into equity and justice in the energy sector. CCP has hired three Research Associates to support the delivery of this project. Jacques (PI), Hviid and Street obtained a grant from CREATE to explore the impact of automated anti-piracy systems.

Contract Research

Contract research keeps CCP in touch with the urgent research questions of the practitioner world; these are only undertaken if they fall squarely within CCP's research areas, and usually only if the funder will allow findings to be published. Surpluses from these contracts are indispensable to the running of the Centre.

A number of contracts were completed in 2016. Broughton-Micova wrote a report for DG Justice on media pluralism and democracy. Fletcher wrote a report for Which? on the effectiveness of demand-side remedies. Waddams wrote a report for the ORR on access to discounted fares and another for CERRE on "Empowering electricity consumers in retail and wholesale markets". CCP was successful in its application to be on the CMA's framework agreement. Added to our previously successful bid to be on a similar framework agreement covering the regulatory agencies in the UK, CCP is now able to bid for relevant contract research put out by these agencies.

Ormosi (PI) and Mariuzzo won a contract from DG Competition to assess the microeconomic impact of enforcement of competition policies on innovation. This work is ongoing and will be completed in 2017.

Knowledge Exchange

The delivery of training courses to practitioners forms and maintains links, dialogue and understanding between CCP and practitioners, leading to more policy relevant research and more academically informed policy development.

In addition to teaching on relevant modules on undergraduate and postgraduate degrees, CCP members deliver bespoke training courses during the year.

Fletcher organised and delivered a two day course on "Economics of Competition Policy for Economists" together with Hviid and a number of practitioners, aimed at participants from the public and private sector. This course, which ran for the third year in a row, attracted the maximum of 40 delegates and was, according to the formal feedback, very well received.

A second two-day course on the "Introduction to the economics of competition policy", designed by Hviid and delivered together with Fletcher, Lyons and Waddams, has now been added to the Civil Service Learning catalogue of courses available to the Government Economic Service (GES) and will be run twice a year. This course has in the past been delivered successfully to the Department of Business, Innovation and Skills and to the GES.

Fletcher has been commissioned by Which? to design and deliver a four day course on consumer policy. This course will be delivered by Fletcher together with a number of CCP colleagues. The contract was agreed in 2016 and the first cycle of delivery will begin in early 2017.

Subscription Membership Scheme

Public sector organisations concerned with competition in and the regulation of markets and consumer policy confirm the value in which they hold CCP by paying for access to its academics. Through its Subscription Membership Scheme, which contributes to the Centre's diverse income portfolio, CCP cements its relationship with policy makers and deepens the channels for the two-way flow of knowledge across the boundary between academic research and practice.

CCP has a subscription membership scheme to which currently subscribe: the Department for Business, Energy and Industrial Strategy (BEIS), CMA, Ofgem, the UK communications industries regulator Ofcom, the UK water regulator Ofwat and, new this year, the Intellectual Property Office (IPO). While available as a one year membership, most members have now availed themselves of the discounted three year membership. This scheme provides CCP with a small element of core funding and strengthens CCP's engagement with core stakeholders.

2.3 Engagement and Dissemination

CCP members engage through publishing, presentations, discussions, consultation responses and blogging.

Academic and policy engagement

Maintaining strong networks with external academics and policy makers gives the Centre vitality and visibility. This can lead to collaborative working, funding opportunities and a wider dissemination of members' research findings.

During 2016 CCP members published 37 articles and book chapters and 14 working papers, gave 108 presentations to academic audiences and a further 45 to predominantly practitioner audiences. CCP responded to 11 public consultations, wrote 22 blog posts, reached 2370 followers on Twitter and has been quoted in the media 41 times. CCP organised a PhD workshop, the annual conference and 35 seminars. In addition, under its membership scheme CCP held five events with subscription members this year.

CCP hosted its annual PhD workshop, taking place 7th-8th June and funded partly by a grant from UEA, for which our PhD students were joined by four students from other institutions for two days of presentations and discussion. The 12th Annual Summer Conference took place on June 9th-10th. The topic was Competition Policy in Financial Markets and the programme boasted a variety of perspectives with a strong policy focus from a truly multi-disciplinary line-up, with speakers from Law, Economics, Politics and Philosophy. Fittingly based at OPEN, the former premises of the regional headquarters of Barclays Bank, the conference attracted over 120 delegates.

One of the membership benefits is a half-day event per year, and in 2016 we had four such meetings at UEA and a further two in London. The agenda of a meeting is determined by the member. These meetings enable a two-way dialogue in which CCP can offer its expertise in answer to questions posed by the members, and CCP can get insights into the issues of core concern to policy makers.

CCP has a long-standing interest in the energy sector. The CMA market inquiry into the energy market continues to provide scope for engagement and impact. Through Deller, Fletcher, Hviid and particularly Waddams CCP engaged Ofgem regarding the consequences of the report, including the proposed remedies. A particular focus has been on Price Comparison Websites and their role in providing a potential remedy for inadequate consumer engagement.

CCP has built up an increased interest in the water sector. Through Deller, Fletcher and Hviid, CCP engaged repeatedly with Anglian Water, meeting to discuss issues of common research interest. There is now a broader engagement between UEA and Anglian Water through the creation of the "Anglian

Centre for Water Studies at UEA” which is likely to be the facilitator of future interactions between CCP and Anglian Water. Deller and Hviid also responded to Ofwat’s consultation on the introduction of competition in the retail of water to households.

CCP continues its engagement through blogging and tweeting. Our number of followers at the end of 2016 exceeds other Competition centres as well as Competition Policy International.

Academic and Policy Impact

CCP members aim for their research to have impact on both the academic community and, through informing the debates, on policy making.

The academic writing of several CCP members was recognised in 2016.

The article, **Morten Hviid** and Matthew Olczak, Raising Rivals’ Fixed Costs, International Journal of the Economics of Business, 23:1, 19-36, 2016, was chosen to receive the International Journal of the Economics of Business Best Paper Prize for 2016.

Two articles by CCP members were nominated for the 2016 Antitrust Writing Awards:

- Vikram Kumar, Robert C. Marshall, Leslie M. Marx, and **Lily Samkharadze**, “Buyer Resistance for Cartel versus Merger”, International Journal of Industrial Organization 39, pp. 71-80, 2015
- **Steve W. Davies, Peter L. Ormosi** and Martin Graffenberger, “Mergers after cartels: How markets react to cartel breakdown”, The Journal of Law and Economics, November 2015

A further article has been nominated in 2016 for the 2017 Antitrust Writing Awards:

- Luke Garrod and **Bruce Lyons**, “Early Settlement in European Merger Control”, The Journal of Industrial Economics (Vol. 64, Issue 1), 2016

CCP research contributes to a number of the impact case studies which the University has identified as potential submissions for the next Research Excellence Framework (REF 2020). The table below contains a list of those which have been recognised as having the potential to demonstrate significant impact.

<i>School</i>	<i>CCP member</i>	<i>Title</i>
ECO	Mariuzzo	Competition Issues in the Evolving Market for Mobile Applications and its Companion Market of Mobile Devices
LAW	Hviid	Retail Price Most Favoured Customer Policies
LAW	Stephan	Dishonesty and the Criminal Cartel Offence
LAW	Stephan	ICN Competition Culture Project Report
LAW	Stephan	Public Attitudes to Price Fixing and Cartel Enforcement
NBS	Ormosi	Measuring the impact of competition policy
NBS	Waddams	Opening residential water markets to competition
NBS	Waddams	The Role of Consumer Behaviour in Markets
PPL	Street	Regulating Collecting Societies / Collective Management Organisations

2.4 Performance against our KPIs

The full set of KPIs and the associated performance is found in appendix 5.1 below. We have exceeded the majority of our key performance indicators, in several cases significantly. In particular we have exceeded by at least 50% our target for publications, presentations both to academic and practitioner audiences, responses to consultations, impact case studies and media mentions.

We have come up short in two areas: working papers, and policy briefs for published papers. The former fluctuate across years and if we include working papers by CCP members published in other

working paper series, we only miss the target marginally. The latter is still a work in progress and we hope to report significant progress on this KPI in 2017.

In a third area, the fraction of working papers submitted to a journal, we do not currently have the relevant data, but of working papers published by the end of 2014, about 50% have subsequently been published in journals.

3 Summary of Activities by research theme

CCP currently reports its research under three themes, each with subthemes.

3.1 Anticompetitive Strategies

Research on anticompetitive behaviours by firms which may harm consumers. This theme covers the core of traditional competition policy.

Cartels

Cartels continue to be one of the key areas of harm to competition and hence enforcement activity. In a recent paper, Crede outlines the pros and cons of cartel screens. Cooper and Kühn study the effect of communication in an experimental game where cooperation may emerge. Sugden with Beraldo have published a paper on the emergence of reciprocally beneficial cooperation which is relevant to tacit collusion. Chowdhury with Moffatt published a survey on the literature on overbidding. Hviid and Stephan published a paper questioning the use of the “object” criteria in the case of cover pricing in procurement auctions. Davies’ and Ormosi’s work on the impact of enforcement of cartel behaviour will lead to a number of publications in the near future. Stephan has written and presented on his first-hand experience from one of the first criminal cartel prosecutions in the UK. CCP associates Garrod and Olczak published a CCP working paper on the effect of firm numbers on successful collusion. This is a very active area of CCP research with a significant number of planned publications, many based on papers presented at CCP or elsewhere. Chiang, Crede, Gioza, Mariuzzo, Mosunova, Samkharadze and Stephan have all presented papers on various aspects of cartel behaviour.

Potentially Anti-competitive Agreements

One of the challenging areas of competition policy is vertical agreements involving various forms of restraints. Unlike cartels which are very unlikely to have any redeeming features, vertical restraints are in many cases efficiency enhancing. Former post-doctoral fellow Mantzari published her paper with Gaudin, from research undertaken while at CCP, on margin squeeze. Bradshaw continues his PhD research on competition policy from a labour law perspective. The majority of the work in this area has been related to vertical agreements in the online world, which have included elements of parities such as Most Favoured Nation (MFN) clauses. Fletcher and Hviid’s paper on linking MFN clauses and Retail Price Maintenance (RPM) was finally published. Lu submitted her thesis which includes chapters on a comparison of the wholesale and the agency model in differentiated markets and on downstream power RPM. Fletcher, Hviid, Kühn and Lu have all presented research in this area.

Mergers and Market Investigations

Lyons and CCP Associate Garrod published their paper on early settlement in EU merger control, a paper which has been nominated for a 2017 Antitrust Writing Award. Ormosi and Mariuzzo published two working papers on merger retrospectives based on their work for DG Competition which was reported on in last year’s annual report. Following political events in 2016, the potential use of public interest criteria in competition analysis and in particular mergers has gained popularity. Reader produced a working paper from his PhD on how to accommodate public interest considerations in merger control. This issue about departing from a pure economics assessment to a broader and more politicised public interest test has become increasingly important since the financial crash and more recently post-Brexit. Lyons, Reader and Stephan produced a working paper on implications of Brexit

for competition policy. Crede, Guy, Kühn, Lyons, Mariuzzo, Ormosi have all presented papers on merger control.

Highlight: In 2015, Fletcher and Lyons were asked by the European Commission to write a report reviewing their practice of “geographic market definition” in merger control. The Commission particularly wanted an independent view on an argument coming from industrialists that globalisation meant wider markets were appropriate and that greater account should be given to supply-side substitution. The core methodology was an in-depth review of ten recent decisions where market definition had been contentious and the conclusions included eight specific recommendations, including clear advice not to use supply-side substitution to widen geographic market definition. The report was submitted in November 2015 and was well received. The publication of the report generated considerable interest beyond the Commission and **in 2016** the authors were invited to present their conclusions to a number of audiences: A special seminar organised by the Association of Competition Economics (ACE) and the European think-tank Bruegel, with a panel of senior practitioners (including the deputy chief economist of DG Competition and a senior economist at Deutsche Telecom) acting as discussants; At the OECD at a 3-hour discussion of geographic market definition by member countries held in Paris; A plenary session of the largest annual gathering of European competition lawyers in Brussels, the 25th IBC annual advanced EU competition law.

3.2 Markets and Systemic Challenges

Research on the effects of other policy objectives sitting alongside traditional competition policy concerns. This theme covers sectors with significant Intellectual Property (IP) rights issues and behaviours by market participants which raise particular issues for policy design and enforcement.

Behavioural Biases, Vulnerable Consumers and Markets

CCP is building on past work on behavioural economics to inform the policy debate. A number of papers, notably by Chowdhury and Sugden, consider various fundamental theoretical issues in consumer behaviour, in many cases subjecting them to experimental testing. Brock has published a working paper on group cohesion and environmental attitudes on energy conservation and presented work on ongoing experimental research on the effect of comparative information. Deller has published a working paper on affordability in the EU and presented this work to various audiences. Deller, Hviid and Waddams are working on analysis of the effects of Price Comparison Websites. Fletcher has presented work on behavioural biases to several audiences. Sugden with co-authors have published on whether markets reveal preferences or shape them. Waddams and CCP Associate Zhu have published their work on consumer behaviour in regulated markets more generally and the energy market in particular.

Highlight: CCP is undertaking a new two-year research programme entitled “Equity and Justice in Energy Markets”, funded by the UK Energy Research Centre (UKERC). Led by Waddams, the research team includes Fletcher, Harker, Deller, Reader, Errington, Turner and Longhurst from CCP, and Dr Tom Hargreaves from the School of Environmental Science at UEA. The programme explores the interaction between retail energy markets and their distributional impacts on groups which may be vulnerable and under-researched, including households in social housing and SMEs. The programme focuses on three dimensions of equity and justice in energy markets: (a) Access to opportunities; (b) Consumer response to opportunities and (c) Outcomes resulting from consumer access and response. The programme is designed around seven inter-related Research Packages to explore these approaches to equity and justice. These packages are: (1) The Statutory and Institutional Context; (2) The Impact of Devolved Administrations; (3) The Consequences of Non-Engagement; (4) Energy Expenditure Shares in the Long Run; (5) Subjective vs Objective Indicators of Affordability Concerns; (6) Variations in Small and Medium Enterprises’ (SME) Engagement and Satisfaction; and (7) New Technology and the Lived Experience.

Highlight: Fletcher produced a report commissioned by the Consumer Association: “The Role of Demand-Side Remedies in Driving Effective Competition: A Review for Which?”. This Review examines the available evidence on demand side remedies: what has been tried, what works, and what doesn’t? The evidence is primarily drawn from the UK, and comprises existing evaluations and reviews, as well as relevant academic research. Although the evidence base is limited, and thus any conclusions must necessarily be somewhat tentative, the Review sets out some thoughts on how the design and use of demand-side remedies might be improved in order to enhance their effectiveness.

Digital and Information Industries

A number of CCP researchers have contributed to the literature and the debates surrounding the Digital Single Market and associated policies. Broughton-Micova has presented work on the future of European audio visual media policy and is generally involved in research into media policy. Harker with Reader presented their work on targeted advertising and online media plurality. Jacques published on copyright and copyright exemptions. These rules determine the competition in the creative sectors where the UK is world-leading. Street has published on an important type of institution within these industries, the collective management organisation (CMO). Izquierdo Sanchez published on how consumers choose between different leisure activities. Korfiatis with co-authors have published a systematic literature review of information-seeking for musical creativity. Korfiatis, Li, Mariuzzo, and Xiong have presented on the impact of online reviews on cannibalization of new product iterations. Mariuzzo, with co-authors, has continued his work on various competition aspects of Apps, including policies on upgrading. Ormosi and Mariuzzo worked with visiting Erasmus student Massimo-Maria Barbato (University of Bologna) on the development of a model to evaluate corporate reputation through social media analysis. The study will analyse large amounts of data through sentiment analysis to evaluate the impact of corporate scandals on public opinion. The part of the project closest to completion focuses on the VW emission scandal.

Several papers based on research funded by the RCUK Centre for Copyright and New Business Models in the Creative Economy (CREATE) and involving Hviid, Izquierdo Sanchez, Jacques and Street have been drafted or are about to be completed. Hviid and Street with Schroff published a paper on whether collective management organisations can be regulated through competition. Hviid, Izquierdo Sanchez and Jacques produced working papers on the structure and importance of intermediaries in both the book and music industry. Hviid, Jacques and Street with Gartska produced a report on the effect of automated take-down algorithms and diversity.

Healthcare and the Pharmaceutical Industry

Guy successfully defended her thesis on “Competition policy in Bismarck and Beveridge healthcare systems” and presented her work at numerous venues. Together with co-author, Sauter, she has published a working paper on the History and Scope of EU Health Law and Policy. Bokhari, Gallasch and Mariuzzo have continued their work on various aspects of pharmaceuticals. Gallasch has published three papers on various legal aspects of pay for delay settlement in the pharmaceutical industry and is working on a project run under the auspice of the United Nations Conference on Trade and Development (UNCTAD) Research Partnership Platform, looking at “increasing access to affordable medicine in developing countries and least developed countries: between regulation and competition”. Focusing on merger cases in the pharma sector handled by the European Commission, Bokhari and Davies are working on ex-post evaluation of multi-product and multi-market mergers. Bokhari and Mariuzzo with CCP Associate Bennato have published a working paper on new products and pack varieties. Bokhari and Mariuzzo have published a working paper evaluating the various specifications in demand systems for drugs. Bokhari, Mariuzzo and Yan are working on a project on assessing the profitability of the antibiotics market in the UK. Bokhari has blogged extensively on various issues arising from the pharmaceutical market, several of which were picked up by the media.

3.3 Institutions

Research on the institutions tasked with the design and implementation of competition laws and economic regulation and their assessment.

Courts (including Private Enforcement)

Courts play a key role in the UK and EU, both by providing oversight of administrative decisions and as a forum for resolving private competition disputes. CCP associate and former CCP post-doctoral fellow Mantzari published a paper on the economic evidence used in regulatory disputes. This research, undertaken while at CCP, revisited the court–regulatory agency relationship in the US and the UK. Hanretty has published work on assessing the importance of lawyer rankings for litigation outcomes. A number of CCP members continue to work on aspects of private enforcement of competition law through the courts. Giosa presented her work on damages claims for bid rigging in Europe. Mariuzzo presented his research on public versus private sanctions: the case of cartels. Peyer published a paper on the new EU Damages Directive, demonstrating that the legal measures in the Damages Directive are unlikely to foster compensation because they fail to create incentives for harmed individuals to seek redress. Peyer presented work on the compensation fallacy in private antitrust enforcement. Stephan presented work on how we will know if public and private competition law enforcement works.

Regulation and the Regulatory State

The future of the UK regulatory state has never looked more uncertain. The challenge presented by Brexit, which is likely to lead to significant adjustments in UK regulatory regimes, is only the most obvious. The financial and economic crisis, and the period of austerity that followed, had already put into question a key feature of the model; namely, the independence of regulators from ministerial interference. The UK referendum on membership of the EU and its outcome have given rise to a number of presentations as well as output reported elsewhere. Kassim discussed the EU regulation of air transport and was a panel member on the topic “National Sovereignty and EU regulation: better in or out?”. Kühn discussed “the EU competition policy and the UK” and Waddams discussed “the EU regulation of utilities and the UK”, both as panel members at the UK in a Changing Europe Conference: “The EU and the UK: the wrong kind of regulation?”.

Kassim led the drafting of a new large-scale research grant application: Revisiting the regulatory state: re-imagining regulatory governance in post- crisis Brexit Britain which was submitted to the ESRC. Errington is working on regulatory institutions as well as on the UKERC grant described above. Hanretty and former CCP member Greasley published their paper on agency termination. This is work growing out of a project studying the culling of quangos in the UK. Klusak presented and published a paper on whether the disclosure of unsolicited sovereign ratings affected bank ratings. Harker and Kreutzmann-Gallasch published on universal service obligations. Ormosi with former CCP member Ashton is working on whether increasing regulatory activity has reduced regulatory offending, using a capture-recapture methodology to assess UK financial regulation. Vantaggiato continues her work on regulatory networks, spending some of the year as a Fulbright-Schuman Scholar at Georgetown University, Washington DC. Waddams presented on “the UK delivery and postal sector” and on “the shift from consumers as recipients to participants in regulation”.

Policy Evaluation

Davies and Ormosi continue to provide leadership for work on policy evaluation, presenting their work on numerous occasions. Mariuzzo with Bennato have worked on assessing differentiated versus homogeneous taxation in imperfectly competitive industries by looking at the Irish Automobile Market. Following the 2015 report by Mariuzzo and Ormosi (PI) on “Evaluation of interventions: merger retrospectives” for DG Competition, two working paper arising from the project were published this year. A new study by Davies, Mariuzzo and Ormosi (PI) with Bennato, also undertaken for DG Competition, focuses on the role of innovation in merger control and is due in spring 2017. Turnpenny with co-authors have published a paper on the environment and regulatory impact assessments.

Highlight: Innovation in merger control, a new study by Davies, Mariuzzo and Ormosi (PI) with Bennato, undertaken for DG Competition: We know relatively little about how specific competition policy interventions affect firms' innovation activities. The main objective of this study is to examine whether such an impact evaluation exercise is feasible. To answer this question the study reviews the economic and legal literature as well as competition policy practice in order to identify recurrent issues that affect competition in innovative markets. The review focuses specifically on the existing empirical evidence regarding the impact of the European Commission's merger, antitrust and cartel decisions on innovation. The study offers a pilot case study to demonstrate how impact on innovation might be best evaluated. By focusing on a specific case the report can answer questions such as: Is the identification of the effect of an enforcement action (merger) possible? Is there sufficiently granular data for this type of analysis? Is there data on adequate counterfactuals?

3.4 Brexit

A main event of 2016 was the June referendum on the UK's continued membership of the EU. CCP engaged in the so called Brexit debate before and after the referendum. Several blogs were produced in the lead-up to the referendum both on general issues relating to the consequence for competition law and its enforcement in case of Brexit and on specific issues related to drug prices. After the referendum, Lyons, Reader and Stephan produced a CCP working paper on the effect of Brexit on competition policy. Fletcher became a member of the Brexit Competition Law Working Group and participated in their report writing. Kassim organised a lecture series both before and after the referendum. Fletcher, Stephan and Waddams were panellists at one of these post referendum debates about what Brexit means, as well as at other Brexit related events and workshops.

4 Conclusions and Forward Plans

It has been another busy year for CCP as we continue our successful transition from core research council funding to a life with a more mixed portfolio of income streams and a more diverse membership. In July, CCP underwent its triennial periodic review, in line with the University's quality control procedures for its Research Centres. The review panel concluded that CCP is "an excellent research centre, as demonstrated by its exceptional research success to date, including excellent outputs, impact, reputation, added value, and support of PhD students and research assistants". This review identified the areas where we as a collective desire to excel and, as this report demonstrates, we continue to excel.

What is in store for 2017? We will continue improving the successful pattern we have developed since 2014. We will filter our opportunities in order to invest our energies in those activities which are of greater value to both the University and to society; which will deliver new and significant academic knowledge with a good chance of becoming high quality research publications, and also provide evidence and insights for policy makers.

From our working paper series, presentations and articles already accepted for publications we know that there are a number of **quality research outputs** in the pipeline for next year's report. While funding is always a challenge, we have reason to be optimistic: several **research council applications** are at the planning stage; the framework agreements to which we are signed up are giving rise to **contract research** which is both interesting and likely to have impact; and knowledge exchange through **bespoke teaching** is generating a steady income. On the latter, we are delivering a new course on consumer policy for Which? in the spring of 2017 and our Introduction to the Economics of Competition Policy course, originally designed for BEIS has now been added to the GES course catalogue and will be delivered twice a year from 2017. Relations with UK public sector regulators

and policy makers will continue to strengthen through our Membership Scheme, keeping our **impact channels** wide open, and we plan to widen our impact horizons through a more active **visitor programme** to develop stronger relationships with international academics with policy links. A highlight for 2017 will as usual be our **Summer Conference**, this year entitled “Just Markets: Distributional Effects of Competition & Economic Regulation”. In a time where there is ever decreasing trust in markets and where governments are increasingly interventionist, understanding how the benefits from competition are shared is essential to offer a policy vision for the future. Finally, we intend to continue to offer a supportive environment in which faculty members and researchers, current and yet to join us, can thrive.

5 Appendices

5.1 KPI Tracker

Measure	Annual KPI	Output 2016
PEER REVIEWED JOURNAL ARTICLES	20	36
CCP WORKING PAPERS	15	12
PROPORTION OF WP SUBMITTED TO JOURNALS	75%	N/A ²
ACADEMIC PRESENTATIONS (Target = 67)	1 per member	108
ACADEMIC EVENTS ORGANISED	3	2
CCP SEMINAR SPEAKERS	30	35
RESEARCH BULLETIN	2	2
POLICY BRIEFINGS/SUMMARIES – WP	100%	11 (92%)
POLICY BRIEFINGS/SUMMARIES – JOURNALS	50%	1 (5%)
POLICY BLOGS	12	22
PRACTITIONER PRESENTATIONS	24	45
RESPONSES TO CONSULTATIONS	6	9
MONITORED IMPACT CASE STUDY (target = 4)	1 per school	9 across 4 schools
TWEETS	100	554
MENTION IN MEDIA	12	41
RESEARCH STUDENTS ATTACHED TO CENTRE	15	20
RESEARCH ASSOCIATES [PT OR FT]	5	6
SUBSCRIPTION MEMBERS	7	6
RCUK OR SIMILAR GRANTS - APPLICATIONS	3	3
TRAINING EVENTS	3	1

² We do not currently have data on submissions. Focusing on working papers up to and including 2014, roughly 50% have been published.

5.2 CCP year on year

Year	3-year average (2014-16)	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Journals	25.00	36	20	19	36	23	23	32	36	24	15	13	16	14
Books	0.33	0	0	1	1	1	2	0	3	1	0	1	0	0
Book chapters	2.67	1	4	3	5	5	3	7	4	0	2	1	0	2
CCP working papers [+ others]	11.33	12 (+2)	13 (+16)	9	13	14	17	19	11	35	21	20	10	4
Reports [commissioned]	4.67	3	8	3	3	1	2	2	0	5	2	1	2	1
Policy Blog posts	15.00	22	13	10	18	30	29	35	9	-	-	-	-	-
CCP events	3.00	2	3	4	4	3	3	5	3	4	4	5	3	1
CCP seminars	37.33	35	41	36	35	36	31	39	32	29	27	39	33	12
Responses to consultations	10.00	9	11	10	10	10	11	6	2	1	-	-	-	-
Faculty members	31.00	35	31	27	28	26	24	21	19	16			13	12
*RAs	4.67	6	4	4	11	8	5	7	5	3			4	1
*PhD students	20.67	20	20	22	22	19	20	19	17	15			15	12

* Research Associates: Some double counting occurs where a CCP RA is also a CCP PhD student. RA count excludes RA's on short contracts.