Foreword

This has been a year of intense activity for the CBR. Considerable progress was made on the Centre’s research agenda of advancing understanding of business innovation, in particular through its major collaboration with Imperial College, London, the UK Innovation Research Centre (UK~IRC), and the completion of EU-commissioned research on finance and innovation (the FINNOV project). In respect of the Centre’s corporate governance research, a project on pension fund governance, commissioned by the Belgian Science Policy Research Office, was completed in this year, and funding from the ESRC obtained for new projects on law and finance in BRIC countries and the role of labour law in poverty alleviation in low- and middle-income countries (both to start in 2013). 2011-12 was also a significant year for the Centre’s from an organisational point of view, as it became a research institution within the Judge Business School, while retaining its strong links to other University departments. In addition, the past year has been one of transition from the point of view of the Centre’s core team. Matthew Bullock stepped down as the Chair of our Advisory Board after more than a decade in this role. We owe a huge debt to Matthew for his invaluable advice and unstinting support. We were delighted that Kate Barker agreed to take over from Matthew as Chair, and that Sandra Dawson, Christoph Loch and Sarah Worthington joined the Board. It was also the full last year in office of our administrator, Sue Moore, who retired in September 2012. We wish her well in her retirement and welcome her successor, Liz Hewitt. We also welcome Michael Kitson, previously a research associate, as Assistant Director and member of the Executive Committee.

Andy Cosh
Acting Director

October 2012
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1. General Overview, Research and Dissemination Highlights

Introduction
The CBR conducts interdisciplinary research on enterprise, innovation and governance in contemporary market economies. Established in 1994, it is now one of the leading centres for social science research on economics, law and business in the UK, and has a growing European and global reputation. The Centre’s current areas of specialisation include the construction and analysis of large and complex datasets on SMEs and innovation, longitudinal analysis of regulatory change affecting business firms, and fieldwork-based studies of corporate governance and organisational practice. The Centre has made a significant contribution to the development of research methods and theory in the analysis of law and finance. The Centre’s research is disseminated to and used by managers, policy-makers and regulators in numerous countries.

The CBR is located on the sixth floor of the Judge Business School building in the centre of Cambridge. It has links to several Cambridge University departments in addition to (JBS), including Engineering and Law. The CBR’s Director, Alan Hughes, is Margaret Thatcher Professor of Enterprise Studies in JBS. Its three assistant directors are Andy Cosh (Emeritus Reader in Economics in the Department of Engineering, and Acting Director of the CBR in 2011-12), Simon Deakin (Professor of Law in the Faculty of Law), and Michael Kitson (Senior Lecturer in International Macroeconomics in JBS).

This report covers the activities of the CBR from the beginning of August 2011 to the end of July 2012.

Research Achievements and Results in 2011-12: Overview
The past year has been one of significant research activity in the CBR, with several projects being completed, including European collaborations on finance and innovation and on pension fund governance. Substantial progress was made on the work forming part of the CBR’s major ESRC-funded project, the UK Innovation Research Centre (the UK*IRC), in collaboration with Imperial College, London. This activity was reflected in a high level of outputs, with 33 articles appearing or forthcoming in refereed journals including Research Policy, Academy of Management Review, Sloan Management Review, California Management Review, Journal of Corporate Law Studies, and Comparative Labor Law and Policy Journal. CBR research was extensively disseminated beyond the academy through user workshops and seminars, book launches, blogs, newspaper articles, podcasts and radio broadcasts. There was extensive policy engagement with government and the private sector in the UK and overseas. This was also a year in which a substantial investment was made in bidding for research funds and in building up the Centre’s research portfolio for the medium term. Funding for two new ESRC-funded grants, for work on law and finance in BRIC countries, and labour law and poverty alleviation in low- and middle-income countries, respectively, was obtained; both projects will begin in 2013.

Dissemination of Research Findings: Highlights in 2011-12
The Centre seeks wide dissemination of its findings with a view to maximising their potential economic and social impact. Recent cases of dissemination beyond the academic community include the following:

Science and Innovation Policy
Alan Hughes took part in multiple meetings with senior civil servants, ministers and policy practitioners. These included a meeting with Lord Heseltine and the Heseltine review panel to discuss innovation policy, meetings with Lord Sainsbury and David Docherty at CIHE to discuss
innovation policy, a meeting with the Technology Strategy Board to discuss business planning and innovation programmes, a meeting with Chris Brown, the Prime Minister’s Education Advisor, to discuss universities, growth and innovation, with John Dodds, the BIS Head of Innovation, to discuss innovation policy, Rob Sullivan, Chief Executive of Broadband Delivery UK and Rohan Silva, Senior Policy Advisor of the Prime Minister’s Policy Unit to discuss innovation and enterprise policy. In addition, he had similar meetings with representatives of the Indian Administrative Service Programme and with representatives of the Industrial Technology Research Institute of Taiwan and the Financial Engineering Unit of the EC Directorate for Research and Innovation to discuss university-industry links. He was also invited by the Wissenschaftsrat to be an external advisory member of the German Excellence Initiative Expert Panel reviewing the development progress of the University of Aachen. He was appointed as Innovator in Residence by Queensland Government, Australia, and the University of Queensland Business School and gave a series of seminars and workshops to the Queensland Government on the development and implementation of innovation policy based on enhanced university-industry cooperation. He also gave an invited lecture in Wellington, New Zealand, to the staff of the New Zealand Government’s Department of Industry and Innovation. He was reappointed for a further term as member of the Prime Minister’s Council for Science and Technology and in that role has provided policy advice and inputs at ministerial level in a number of areas relating to the CBR’s research programme.

Presentations based on science policy and technology work by Hughes included presentations to the Medical Research Council Economic Impact Workshop, the HEFCE Seminar on University-Industry Links and Impacts Analysis, presentations at Mexico City Science & Innovation Week including both a public lecture and presentations at individual ministries, a series of presentations in India, including Delhi and Bangalore, associated with the UK’s Ministerial Delegation to the Global Innovation Roundtable in Delhi on 14th November 2011, and a series of business focused meetings, including a CIHE/Anglo-American Breakfast meeting on the impact of UK R&D.

Michael Kitson gave presentations on innovation policy and practice and university-industry links to Cambridge in America meetings in Chicago and San Francisco, to the American Association of Geographers meeting in New York, at Birzeit University in the Palestinian Territories as well as user oriented conferences in Maribor and Brussels with a focus on regional aspects of innovation policy development.

**UK~IRC Innovation Summit.**

In December, the CBR co-organized an Innovation Summit with IBM. This event was held at IBM Hursley and received 100 delegates, from 60 different organizations. The programme included speakers from Arup, Pfizer, Xerox, IBM, GSK, Boeing, Nokia, 100% Open, and Vestas among others, allowing us to present our research alongside industry experience. Over 65% of the delegates were from industry, with the rest from the policy and academic communities. The feedback received from the event was overwhelmingly positive, with a total score of 4.6 out of 5 for satisfaction for the overall event.

**Open innovation among UK firms.**

Over the past year, we have been publicising our 2010 survey of open innovation. This has included the launch of a major report and presentations at UK and international events, including TSB’s Innovate conference, Global Economic Symposium (Germany), Industrial Fellows Forum (US), and the OECD’s NESTI meeting (France). This work has stimulated a raft of publications and working papers.
Hedge Fund Activism in Japan

John Buchanan and Simon Deakin presented the findings of their study with Dominic Chai, Hedge Fund Activism in Japan, at a series of meetings in Tokyo in July 2012. These included a seminar organised at the Japanese national employers’ association, the Keidanren, and a round table discussion at the British-Japan Chamber of Commerce. They also presented the work to a seminar organised at the Daiwa Anglo-Japanese Foundation in London. The research analyses the impact of hedge fund activism on Japanese firms during the last decade, and analyses the reasons for the limited impact of this form of shareholder engagement in Japan by comparison to the USA and UK.

Comment on the Kay Review of Equity Markets and Short-Termism in the UK

A blog by Simon Deakin, published on the FT Economist’s Forum, discussed the Kay report on equity markets and short-termism which was commissioned by the UK government and published in the course of 2012. The blog argued that while the Kay report was on the right path in arguing for a long-term approach to investment decisions, a bolder approach was needed to corporate governance regulation, including reform of the UK Takeover Code and a realignment of company law with a view to promoting sustainable enterprise. See: http://blogs.ft.com/economistsforum/2012/03/#axzz1rfBQeTTt.

The consequences of age discrimination legislation and the abolition of the default retirement age

In an article in the legal weekly the New Law Journal, Catherine Barnard and Simon Deakin offered a critical analysis of the Coalition government’s decision to abolish the default retirement age law, which had enabled employers to operate a mandatory retirement age as long as certain procedures were followed. The effect of loosening the law to allow employees the option to carry on working after 65 or other normal retirement age would, the authors suggested, be to add cost and complexity to firms’ personnel management and capability-related procedures, while benefiting an already privileged section of the workforce (older employees in secure employment) at the expense of younger and marginalized workers.

The Impact of CBR Research: Highlights in 2011-12

The Centre places a high priority on ensuring that its research reaches policy makers and, as far as possible, that it has a concrete outcome on policy deliberations. In 2007 the conclusions of a review by the ESRC of the CBR’s impact on policy users were published.¹ This evaluation identified ‘significant policy and practice impacts generated by the ESRC Centre for Business Research (CBR). These included, among others, contributions to the Law Reform Commission’s deliberations on and codification of Director’s Duties (for more effective corporate governance) and evidence of the positive effects of Government’s new insolvency (personal bankruptcy) laws……the most outstanding impact was found in two areas of CBR’s research. This was the Centre’s sterling work in labour and employment relations and the collection of data on Small and Medium sized enterprises (SMEs).’ Recent cases of policy and practice impact include the following:

Macroeconomic Policy and Structural Change

¹ Jordi Molas-Gallart and Puay Tang, Policy and Practice Impacts of ESRC Funded Research: Case Study of the ESRC Centre for Business Research Report prepared for the Communications and Information Directorate Economic and Social Research Council (March 2007).
As part of the CBR’s work on services innovation carried out under the auspices of the UK~IRC, Bill Martin has produced an influential series of reports on the development of productivity and its implications for stimulating economic growth and rebalancing the economy. This work achieved substantial coverage in the financial press, including The Sunday Times, The Guardian, BBC News Business, The Financial Times, The New York Times, The Observer, The Economist and Prospect Magazine and led to a series of presentations and meetings in the UK, including the Treasury and the Bank of England at which the work was discussed. Coutts and Rowthorn were invited by the Foresight Project on the Future of UK Manufacturing to provide an analysis on the changing role of manufacturing in UK trade and to provide scenario analyses of future possible trajectories for the development of manufacturing.

**Contributions to new UK innovation policy**

The UK~IRC was acknowledged in the Government’s ‘Innovation and Research Strategy for Growth’ as providing valuable assistance in terms of pathways involving people exchange, idea sharing and evidence. This is reflected in direct references to the UK~IRC pathway event we held in February 2011 to exchange ideas between the innovation policy and research communities. It is also evidenced by the fact that the Strategy and supporting documents make 9 references to the published work of the UK~IRC. These references include citing our work in relation to new insights on the role of intangibles in productivity growth, on the challenges for small and medium sized firms using intellectual property, and in relation to the provision of new and unique evidence on university industry links. These contributions have widened and deepened the analysis possible of such relationships in the UK policy context, providing conceptual and evidential impact to the policy domain. For example, in the context our work on university industry links, the BIS strategy economics paper states ‘these results are important for our understanding of the role of universities in the innovation system’ (p.84). Direct provision of personal advice and presentations were made in several meetings with senior figures within BIS, including Ministers, the Chief Government Scientist, and the Director and Deputy Directors of BIS. Professor Hughes was the also the invited academic Keynote speaker at the BIS stakeholder conference on implementing the Innovation and Research Strategy for Growth at the Medical Research Council in London on 13 January 2012.

**The impact of the legal and corporate governance framework on British manufacturing**

Simon Deakin was commissioned by the Government Science Office to write a report for the Foresight Review of the impact of the legal framework for corporate governance on British manufacturing. The report, which will be completed in October 2012, is looking at the implications for long-term strategic planning and investments of the UK’s shareholder-focused corporate governance system, and at the implications of insolvency and employment law for early-stage financing and SME growth.

**The Quality of CBR Research Outputs**

The CBR aims to publish articles on a regular basis in leading or core journals in each of the disciplinary areas in which it carries out research (economics, innovation studies, geography, law, management, accounting, political science and sociology). Because of the uneven flow of research findings, it will not necessarily be possible to produce a large number of outputs in core journals in every year. Our aim is to achieve a substantial number of high-quality outputs over the normal life of a project.
The Centre recognises that not all research outputs will be ideally suited to publication in article form. Thus outputs in the forms of books, book chapters, and governmental reports are also encouraged. The CBR also produces a Special Publications series focusing on evidence based policy reports and the outputs of public, commissioned evaluation reports. We aim to produce a balanced flow of research outputs of various kinds over the project life cycle.

The Centre does not make a REF submission in its own right. CBR outputs are credited to the university departments of the PIs and researchers concerned. In this way the Centre makes a direct contribution to the RAE/REF entries of departments within Cambridge and at other universities (as CBR-based researchers often go on to find employment elsewhere).

Since the start of the current REF cycle in 2008, CBR research has appeared, or is forthcoming, in the following highly-ranked journals (new journals in 2011-12 are italicised):

<table>
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<tr>
<th>Discipline</th>
<th>Journal</th>
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<tbody>
<tr>
<td>Economics and Innovation Studies</td>
<td>Economic Journal; Economics Letters; Journal of Institutional and Theoretical Economics; Research Policy; The Journal of Technology Transfer; Small Business Economics; Accounting, Organizations and Society; Industrial and Corporate Change; Prometheus; Academy of Management Review; Sloan Management Review; California Management Review</td>
</tr>
<tr>
<td>Law and Industrial Relations</td>
<td>Journal of Empirical Legal Studies; Review of Law and Economics; Law and Society Review; American Journal of Comparative Law; Modern Law Review; Journal of Law and Society; British Journal of Industrial Relations; Socio-Economic Review; Comparative Labor Law and Policy Journal; Journal of Corporate Law Studies</td>
</tr>
<tr>
<td>Political Science</td>
<td>Comparative Political Studies; Political Quarterly; New Political Economy</td>
</tr>
<tr>
<td>Economic Geography</td>
<td>Journal of Economic Geography; Regional Studies; Cambridge Journal of the Regions, Economy and Society</td>
</tr>
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</table>

The CBR also seeks to make a significant contribution to raising the national and international profile of social science research. International and national recognition for the quality of CBR work has come in various forms. Recent highlights include:

- founding of UK~IRC after a national competition as a new centre of excellence in evidence based policy and identification by ESRC in 2010 of UK~IRC as its core strategic investment in this area.
- reappointment of Alan Hughes to membership of the Prime Minister’s Council for Science and Technology, the UK’s senior advisory body in this area.
• appointment of Alan Hughes as Queensland Government Innovator in Residence, and an Honorary Professorship at the University of Queensland Business School.

• appointment of Alan Hughes to a Seelye Fellowship by the University of Auckland, New Zealand.

• appointment of Alan Hughes as a member of the EPSRC Strategic Advisory Network and of the Patents Research Advisory Group of the Intellectual Property.

• appointment of Alan Hughes as a member of the Lead Expert Group of the Foresight Project on the Future of UK Manufacturing Industry.

• award to Simon Deakin of an honorary doctorate by the Catholic University of Louvain, Belgium.

Contributions to the Development of Research Capacity

Research methods workshops

Simon Deakin gave courses on research methodology in the areas of law and economics, empirical legal studies and corporate governance research at the Graduate School of Policy and Management, Doshisha University, and the Department of Law, European University Institute, Florence, as well as contributing to the Cambridge Faculty of Law’s research methods course.

Alan Hughes gave courses on survey methodology and policy evaluation methodology at the University of Auckland Business School, at the Graduate School of Policy and Management, Doshisha University and at the University of Queensland Business School.

Ph.D. projects

In 2011-12, Andy Cosh supervised theses on open innovation in the clean energy sector (Nelli Theyl), innovation policy in pharmaceuticals (Vivian Tsai), and comparison of private equity and corporate acquisitions (Joanne Jia). Simon Deakin supervised theses on company law in Europe (Viviana Mollica), EU law and the Eurozone crisis (Samuel Dahan), age discrimination law (Alysia Blackham), and collective EU labour law (Fotis Vergis). Alan Hughes supervised a thesis on innovation policy and smart metering (Alberto García Mogollón). In addition a number of the Centre’s research associates were engaged in Ph.D. supervision.

Destinations of post-doctoral researchers

Joanne Zhang, UK-IRC Research Fellow, took up a lectureship at the University of East Anglia.

Cher Li, UK-IRC Research Fellow, took up an Associate Professorship at the University of Nottingham.

A Note on the Organisation, History and Structure of the Centre

Organisation

The CBR has a Director, Alan Hughes, and three Assistant Directors, Andy Cosh, Simon Deakin and Michael Kitson. In 2012 Alan Hughes was on leave and Andy Cosh was Acting Director.
In the course of 2011-12 the Centre had a complement of 13 research staff (9.2 FTEs) and 5 administrative and secretarial staff (3.5 FTEs).

A network of over 30 additional researchers are linked to the CBR’s work as Research Associates, taking part in projects in various capacities, including in some cases as principal investigators. In addition to drawing on researchers from the Judge Business School, the CBR has strong ties to other departments of the University of Cambridge, including the Faculty of Economics, the Department of Engineering, the Department of Geography, the Faculty of Human, Social and Political Sciences, the Department of Land Economy, and the Faculty of Law.

Management structure
The CBR currently has two programmes of interdisciplinary research. The first, led by Andy Cosh, focuses on Enterprise and Innovation, the second, led by Simon Deakin, focuses on Corporate Governance. These programmes are supported by the Survey and Database Unit (led by Cosh) which provides expertise for survey based work and is responsible for the highly regarded biennial surveys of the UK small business sector, and the Policy Evaluation Unit (led by Cosh and Hughes) which specialises in evidence based policy evaluation linked to the core research programmes.

The Survey and Database Unit provides the CBR with a unique in-house integrated approach to the design and interpretation of complex large scale surveys in both the Corporate Governance and Enterprise & Innovation programmes. It has been associated with many of the CBR’s most distinctive contributions in terms of SME growth; innovation and financing; the international comparisons of innovation activity; and most recently the largest survey in the world to date covering the knowledge exchange activities of over 22,000 UK academics in all disciplines and UK Higher Education Institutions.

History
The contract between the ESRC and the University of Cambridge under which the CBR was established in 1994 specified a number of aims and objectives to be met by the Scientific Programme of the CBR.

Major advances were expected in these areas:

- the analysis of the interrelationships between management strategy, takeovers and business performance in an international competitive context;
- the analysis of the relationship between corporate governance structures, incentives systems, business performance and the regulatory and legal environment;
- the analysis of policy, entrepreneurial styles, innovation, finance, training and international activity and networking and cooperative activity in relation to the survival, growth and development of small and medium-sized firms.

It was expected that in making these advances, the CBR would make a significant contribution to the construction and analysis of large and complex datasets including survey and panel data.

In order to achieve the objectives set out above, the CBR was to carry out the following actions:

- conduct an interdisciplinary research programme in Business Research;
- construct and maintain survey and related databases necessary for the conduct of Business Research;
- mount a series of workshops and seminars in Business Research;
• produce and distribute a Working Paper Series to disseminate the results of the Centre’s research programme;
• maintain contact with researchers in the UK and abroad in cognate areas of research, and with potential users of the output of the Centre’s research, in designing and executing the Centre’s programme of research.

It was also expected that, in making these advances, the CBR would make significant contributions to the following areas: a) economics, b) human geography, c) management and business studies, and d) socio-legal studies.

In its final report as an ESRC-designated research centre (Report on Activities 2002-4), the CBR set out how it had achieved these objectives in the three years prior to the ending of core funding in December 2004. These objectives remained broadly relevant going forward. However, following the ending of core funding, the Centre’s management structure was reorganized to reflect a new focus on the twin themes of Enterprise and Innovation and Corporate Governance. These now correspond to the Centre’s two research programmes.

In 2009 the CBR and the Entrepreneurship and Innovation group at Imperial College London successfully bid for funds to establish a new UK Innovation Research Centre (UK~IRC) funded by the Economic and Social Research Council (ESRC), National Endowment for Science, Technology and the Arts (NESTA), the Department for Business Innovation and Skills (BIS) and the Technology Strategy Board (TSB) of which Hughes is the Director. The research activities of the UK~IRC are presented within the Enterprise and Innovation programme section of the CBR Annual Report.
2. Project reports

Enterprise and Innovation Programme: Director Andy Cosh

The Enterprise and Innovation programme is concerned with enterprise and innovation and their links to productivity and firm growth. In particular, a key aspect of our work is the financing of innovation and the difficulties faced by translating scientific advance into commercial success. Amongst the principal objectives of this programme are the analysis of the innovative performance, financial and management characteristics, and location of smaller firms, and the design and evaluation of policies towards supporting innovation and entrepreneurship. This analysis has involved close interdisciplinary collaboration between CBR researchers in economics, geography, law and sociology; and has been strengthened by collaboration with other groups in the UK and abroad.

A major new research area analyses the factors that affect the incidence, form, effectiveness and regional impact of knowledge exchange activities between the business and higher education sectors. It identifies the way these interactions vary across nations and regions. Knowledge exchange includes the full range of ways in which the business community and the higher education sector interact and which may affect business and regional economic development. These interactions include educational and training activities, research publications and patenting, conferences, contracting and consulting activity, internships, joint research and development and licensing and new business formation.

This programme has established an international reputation among policy makers, practitioners and researchers as an authoritative source of analysis, information and evaluation of SME growth and survival. Particular emphasis has been placed on analyzing and charting developments in training, innovation, governance, and the impact of enterprise policy. Methodological advances have been made in the measurement and analysis of SME growth and performance, and in policy evaluation, and these have been incorporated into national and international data collection processes and policy development. A major intellectual contribution of the programme has been the creation of a longitudinal panel set of data for the UK SME sector based on a biennial survey of over 2000 independent businesses.

Evidence Base for Innovation Policy (UK~IRC)

Project team: Alan Hughes (Cambridge), David Connell (Cambridge), Michael Kitson (Cambridge), Stan Metcalfe (Cambridge), Andrea Mina (Cambridge), Jocelyn Probert (Cambridge), Ammon Salter (Imperial), Keith Smith (Imperial)
Project dates: 2009-2014
Funding: ESRC, NESTA, BIS, TSB

This project draws on inputs by senior academics associated with the UK~IRC programme and other academics and policy makers taking part in the research process. Its objectives are to identify the principal channels by which the evidence base on innovation informs public policy in its national comparative context. Substantive work began in the second full year of funding. It is intended to run throughout the life of the UK~IRC. It has begun with a series of seminars and discussions with senior policy makers in the UK which has been linked with a number of knowledge hub events and with the establishment of a collaborative arrangement with the Centre for Science and Policy (CSaP) at Cambridge.
In addition to this activity, the project has worked in collaboration with three other projects funded respectively by the EPSRC and the DIME EU Network to fund for fieldwork which has been carried out in the USA and Japan and has involved a series of case study interviews with key policy makers and intermediaries involved in the policy development process. In addition funding from EPSRC, BP and the Council for industry and Higher Education (CIHE) and through the IKC project has led to a substantial project on enhancing the Value of UK R&D The final outputs of the evidence based policy project will be a series of papers in the evidence base for policy past, present and future. Important intermediate inputs involve the development of a series of seminars for UK policy makers drawing together not only the insights arising from this stream of research itself, but from the wider innovation policy research base in the UK. Three publications based on the work on Enhancing the Value of UK R&D project were published in 2012.

The first explored the UK R&D landscape (Hughes and Mina, 2011) through an analysis of official statistical sources on R&D activities. It found that despite increases in investment in higher education research, there is an R&D funding gap between the UK and its major industrial competitors. Furthermore, R&D is highly concentrated in the UK’s biggest firms with only 3.5% of R&D being conducted by independent SMEs in 2011. Finally, the UK innovation system is simultaneously open and vulnerable: overseas investment in UK R&D is very high by international standards, a clear sign of the attractiveness of the UK as a location for R&D, but this openness also means that the country is relatively vulnerable to strategic investment decisions made outside the UK.

The second report (Hughes and Martin, 2012) reviewed and discussed existing evidence on the impact of publicly-funded R&D on the UK’s economy, firms and society. It established that quantification is exceptionally difficult and attempts to reduce multiple inputs to a single rate of return often require heroic assumptions. Secondly, that successful public-sector impact most often relies on complementary private and charitable sector investment. And finally that policy must be shaped by a systems view of impact, rather than by a simple linear model. Rate of return calculations provide little policy guidance and intermediate and trajectory-based measures must be developed that focus on the interactions within the innovation system.

The third report (Mina and Probert, 2012) provided a wealth of original qualitative evidence on the interaction between companies and the UK public research base. Its aim was to highlight strengths and weaknesses, and challenges and opportunities for UK plc., by focusing on the innovation value chains of four sectors of the economy that are characterised by different patterns of R&D and innovation. These are the pharmaceutical, energy, creative-digital-IT (CDIT) and construction sectors. (http://www.cihe.co.uk/category/knowledge/publications/)

The achievements to date are:

- Established collaborative arrangement with CSaP to host a series of business and policy practitioners to visit UK~IRC and establish potential contacts
- Co-hosted with CSaP a senior UK policy forum on systems approaches to the development of policy attended by representatives of BIS, DEFRA, Ministry of Defence and National Health trusts.
- Held a one-day seminar for BIS on key aspects of evidence from innovation studies research relevant to the current UK innovation review in progress.
• Conducted interviews in USA and Japan with key policy practitioners, university leaders and intermediate research institutions.

• Held an innovation summit to draw together public sector, research councils’, charitable organisations’ attitudes towards the assessment of impact and the experience of impact assessment in the USA.

• Launched a joint CIHE/CBR Task Force on the Impact of UK R&D resulting in the three reports described above.

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<tr>
<th>Outputs for Evidence Base for Innovation Policy (UK~IRC)</th>
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<tbody>
<tr>
<td>Articles in refereed Journals</td>
</tr>
<tr>
<td>Consultancy and advice given</td>
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<tr>
<td>Visitors</td>
</tr>
<tr>
<td>Conference papers given</td>
</tr>
<tr>
<td>Meetings/Workshops held/attended</td>
</tr>
<tr>
<td>Membership of Committees external to the University</td>
</tr>
<tr>
<td>Other Publications, e.g book reviews, pamphlets</td>
</tr>
<tr>
<td>Visitors</td>
</tr>
</tbody>
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**FINNOV - Finance, Innovation & Growth: Changing Patterns and Policy Implications**

Cambridge Project leader: Andrea Mina

Other Principal Investigators: Alan Hughes and Stan Metcalfe

Research Fellow: Henry Lahr, Jocelyn Probert, Samantha Sharpe

Collaborating Institutions: The Open University (UK), Sant'Anna School of Advanced Studies (Italy), Polytechnic of University of Marche (Italy), Economics Institute (Czech Republic), University of Bordeaux (France), University of Sussex (UK)

Project dates: 2009-2011

Funding: European Commission, FP7

The CBR successfully led the EC FP7 FINNOV consortium activities on the work package “Capital Markets and Innovation: Financing Business Experimentation in Europe”. The international partners of the project, and its projects leaders, were: the Open University, the Sant'Anna School of Advanced Studies, the Polytechnic University of Marche, the Economics Institute, the University of Bordeaux and the University of Sussex. The Final Conference of the project was opened by the Rt Hon David Willetts MP (Minister of State, Universities and Science, Department for Business, Innovation and Skills), Chi Onwurah MP (Member of the UK Parliament and Shadow Minister for Innovation & Science) and Dr Peter Dröll (Head of Unit, Policy Development for Industrial Innovation, DG Enterprise and Industry, European Commission) in the House of Commons on 2 February 2012.
The FINNOV consortium explored the link between the financial sector and real economy, analysing to what extent financial activities promote or impede industrial growth and innovation. In this context, the CBR team, led by Andrea Mina, investigated the sources of financing for early technology development; the co-determinants of financial backing of new firms and innovation; the characteristics of the venturing process; emergent trends in innovation investments, business experimentation and related policy needs. The team has produced several papers on external capital markets, venture capital, corporate venture capital, R&D services and innovation. One paper is forthcoming, three are under review in leading journals and two are in preparation for submission by the end of the year. This body of original research was presented and is being disseminated at major innovation and applied finance conferences, in addition to several invited research and policy seminars.

| Outputs for FINNOV Finance, Innovation & Growth: Changing Patterns and Policy Implications |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| **Articles in refereed Journals** | **Other Publications, e.g. book reviews, pamphlets** | **123 124 125 126 127 128** |
| **Collaboration with other Research Teams** | **Conference papers given** | **188 223 224 225 226 227 228** |
| **Media Coverage (a) Newspapers** | **Media Coverage (b) TV/Radio** | **348** |
| 30 31 39 | 342 343 344 345 346 | |

**University-Industry Knowledge Exchange: Demand Pull, Supply Push and the Public Space Role of Higher Education Institutions in the UK Regions**

Principal Investigators: Alan Hughes and Michael Kitson
Funding: ESRC

This research identified the factors that affect the incidence, form, effectiveness and regional impact of knowledge exchange activities between the business and higher education sectors in the UK. It identified the way these interactions vary across UK regions and within those regions. Knowledge exchange includes the full range of ways in which the business community and the higher education sector interact and which may affect business and regional economic development. These interactions include educational and training activities, research publications and patenting, conferences, contracting and consulting activity, internships, joint research and development and licensing and new business formation.

This project was completed and an end of award report submitted to the ESRC. A report was published through UK^IRC based on the project’s survey of over 20,000 UK academics (Abreu et al., 2009) and a companion volume is in preparation based on the parallel survey of university-industry connections covering 2,500 UK manufacturing and service firms. Presentations based on the research have been made at the University of Edinburgh; NESTA, London; Strathclyde; the UK Cabinet Office; AURIL Annual Conference, Bristol; Imperial College; the UK Research Councils Cross-Council Knowledge Transfer and Economic Impact Group; Research Councils UK; the BIS OECD Innovation Policy Seminar; HEFCE; Nottingham University Business School; the Political Studies Association Annual Conference London; Doshisha University Kyoto; the Japan Science Foundation, Tokyo; the Keidenran Tokyo (Japanese Industry Confederation); and meetings with government ministers (further information is available in previous annual reports).
The ESRC end of award evaluation rated the research project as ‘outstanding’ and the success of the research led to additional related research projects.

| Outputs for University-Industry Knowledge Exchange: Demand Pull, Supply Push and the Public Space Role of Higher Education Institutions in the UK Regions |
|---|---|---|
| Membership of Committees external to the University | 295 | Chapters in books | 63 64 |
| Conference papers/presentations given | 195 196 197 198 199 | Consultancy and Advice given (paid or unpaid) | 327 |

**SME Policy & Performance**

Project leaders: Alan Hughes and Andy Cosh  
Other Principal Investigators and Associates: Anna Bullock, Bob Bennett, Xiaolan Fu, Jaeho Lee, Vadim Grinevich, Ana Siqueira, Douglas Cumming (York University, Ontario), Isobel Milner, Fabrizio Trau (Italian Confederation of Industry)  
Funding: ESRC; AIST, Japan; various other shorter term funds and contract research grants  
Project Dates: Ongoing

This project is concerned with developing and testing models of small and medium sized enterprise (SME) performance and its determinants, with policy analysis and with methods of complex survey design and analysis necessary to investigate models of business performance. Performance includes innovative activity and export activity, as well as growth, profitability and survival. Determinants include internal management and organisational characteristics, the strategic behaviour of managers including strategies of co-operation and collaboration, as well as external environmental factors, including financial, labour and product market constraints. The project is concerned with policy evaluation and evaluation methodology, and with the comparison of the performance characteristics of different groups of firms including high-technology and conventional businesses. The project develops and utilises appropriate databases for these purposes including, in particular, the complex panel survey data generated by the CBR biennial survey of SMEs. This survey is carried out by the project leaders and managed by Anna Bullock via the CBR Survey and Database Unit. The project is also concerned with the development of appropriate survey instruments for performance measurement and analysis. It also draws on the results of a complementary project on methods of missing data imputation (Missing Observations in Survey Data: An Experimental Approach) to enhance the usefulness of performance survey datasets. The econometric analysis undertaken is characterised by the development and use of appropriate multivariate techniques including sample selection modelling and robust regression methods. Careful account is taken of the extreme heterogeneity of SME performance and the endemic sample attrition and self-selection biases which can arise in complex panel data analysis. In addition the project produces rigorous but user friendly presentations of key survey results in the biennial publication of reports based on the CBR SME survey, as well as custom designed articles for practitioner journals. Use is also made of complementary case study and qualitative analytical techniques, and of interview based piloting of alternative survey instruments to assist in complex survey design.
CBR SME Survey 2011

The CBR has carried out surveys of British SMEs in 1991, 1993, 1995, 1997, 1999, 2002, 2004 and 2008 and has created several panels of firms. This rich material has led to several publications relating to training, management practices, innovation, business advice and finance; and their impacts on firm performance. The last study was carried out in November 2008 at the onset of the credit crunch recession and compared how SMEs were faring in raising finance compared with both 2004 and the previous recession of 1991. The 2011 survey has resulted in over 1900 responses, the analysis of which has recently begun. One important part of this analysis is to explore the financing of SMEs three years into the recession. Another important novel aspect of this survey is an in-depth exploration of family businesses.

Recent SME surveys using the CBR survey instrument have been carried out in Australia and New Zealand; and preparations are under way for similar surveys in China and Japan. Teams from the CBR, Australia, New Zealand and Japan are currently engaged in the analysis of these rich data.

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<tr>
<th>Outputs for SME Policy &amp; Performance</th>
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<tbody>
<tr>
<td>Articles in refereed Journals</td>
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<td>Book Reviews, Pamphlets</td>
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<td>113 114</td>
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<td>Collaboration with other Research Teams</td>
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<td>Workshops held</td>
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<td>253 254 255 256 286</td>
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<tr>
<td>Membership of Committees external to the University</td>
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<td>290 291</td>
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The Integrated Knowledge Centre (IKC) Commercialisation Laboratory

Project leaders: Alan Hughes and David Connell
Other Principal Investigator: Andrea Mina
Collaborating Faculties: Judge Business School, Engineering (CAPE and the Institute for Manufacturing), Physics (Cavendish)
Project dates: 2007-11
Funding: EPSRC

The CIKC is a large EPSRC-funded programme of research aimed to the exploratory development and commercialisation of research conducted in the area of photonics and advanced electronics by groups at the University of Cambridge’s Departments of Physics and Electrical Engineering jointly with industrial partners and teams at the Judge Business School, the Institute for Manufacturing and the CBR.

Within the CIKC programme the objectives of the CBR Commercialisation Laboratory are:
1) To investigate the innovation dynamics of the CIKC technical projects
2) To facilitate commercialisation processes of CIKC technologies
3) To compare relevant international policy frameworks for the commercialisation of technologies emerging at public-private interfaces.

Regular meetings have taken place with principal investigators during which information was collected on development paths, obstacles, opportunities and changes in behaviours and expectations over a period of approximately three years. Facilitation of commercialisation activities has progressed hand in hand with this regular review process and has led to a number of initiatives for exploitation of the innovative potential of CIKC technical projects. The comparative policy work has involved fieldwork at international sites that were identified as key in the photonics and electronics area through both desktop research and the PI interview programme. The CBR team has conducted site visits to Germany, Belgium, Taiwan, South Korea, Japan and the USA.

Facilitation of CIKC commercialisation activities has led to a number of initiatives for exploitation of the innovative potential of CIKC technical projects (see http://www.g.eng.cam.ac.uk/CIKC/). The comparative policy work, based on site visits to Germany, Belgium, Taiwan, South Korea, Japan and the USA, led to the manuscript ‘The Challenge of Technology Development in Intermediate Research Organisations’ (by Andrea Mina, David Connell and Alan Hughes) which is being prepared for submission to a leading innovation journal. The longitudinal study of the CIKC university-industry innovation processes will result is a new paper, in progress, which will relate the innovation pathways to resources, barriers and constraints, opportunities, behaviours and expectations.

As part of the policy engagement and impact and dissemination plan, after playing an active role in the consultation process that led to the Hauser Report on The Current and Future Role of Technology and Innovation Centres in the UK, the conference ‘Re-thinking the Impact: Private and Public R&D in an age of austerity’ was successfully organised at the Judge Business School in December 2010 jointly with the UK Innovation Research Centre. This included contributions from distinguished experts and policy makers. In addition, the team has submitted evidence for the planning of future UK innovation policy initiatives to the House of Commons Select Committee on Science and Technology.

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<th>Outputs for The Integrated Knowledge Centre (IKC)</th>
<th>Commercialisation Laboratory</th>
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<td>287 288 289 294</td>
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<td>165 166 167 182 183</td>
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<tr>
<td>Collaboration with other research teams</td>
<td>200 201 202 203 204</td>
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<td>137 138</td>
<td>205 206 207</td>
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New Modes of Innovation: Managerial and Strategic Business Practices and Open Innovation (UK~IRC)

Project leaders: Andy Cosh and Joanne Zhang
Other Principal Investigators: Alan Hughes (Cambridge), Michael Kitson (Cambridge), Tim Minshall (Cambridge), Ammon Salter (Imperial), Oliver Alexy (Imperial), Elif Moreau-Bascavusoglu (Cambridge), Gerald Avison (Business), Chas Sims (Business)
Project dates: 2009-2014
Funding: ESRC, NESTA, BIS, TSB

The growing interest in open innovation has been driven by the phenomenon where organisations are increasingly moving toward network-based forms of innovation, sourcing ideas through licensing agreements, formal alliances and mergers and acquisitions and the use of a wide variety of sources of knowledge for innovation. Although attempts to examine open innovation using the UK innovation survey have made some progress, we still lack in-depth data at the sectoral level and a clear theoretical understanding of how firms build capabilities to be open and how they can successful integrate external actors into their innovation processes.

In order to deepen and extend our existing knowledge on the nature and extent of open innovation among UK firms, this project aims to shed light on the organizational mechanisms and capabilities as well as institutional arrangements that are required to foster effective open innovation. In particular, it addresses three questions:

- How do patterns of usage of OI practices vary across firms, sectors and sizes?
- What are the factors driving the firms’ usage of OI practices?
- How does the firms’ usage of OI practices affect their innovativeness and performance?

Our ‘open innovation’ survey among UK firms with up to 999 employees, covering both manufacturing and business services sectors in 2010 resulted in 1202 completed interviews. The full report ‘Open innovation choices: what is British enterprise doing?’ was published in June 2011 and a launch event was held at NESTA. Subsequently, the report was presented to an OECD NESTA meeting and this may result in collaboration over the creation of an open innovation module that could be bolted on to existing innovation surveys (particularly CIS).

We have also actively engaged in academic, policymaker and practitioner community to discuss and disseminate our research. Several papers are being prepared by members of the team and a number have been accepted for publication. A key conference was held in June to celebrate a decade since Chesbrough coined the term open innovation and a special issue of Research Policy on “Open Innovation” and several members of the team have had papers accepted for this conference and in leading journals. Our UK~IRC research student Nelli Theyel has had a paper accepted for the Best Paper Proceedings of the Academy of Management conference this summer and has had another paper in the special issue of the International Small Business Journal on ”Open Innovation in SMEs: An International Perspective on a Dynamic Approach to Contemporary Entrepreneurship”.

In addition to this exploitation of the results of our survey, other case study work has been initiated that will provide rich insights into how open innovation does, and does not, work.

- Nelli Theyel is presently in California carrying out a series of interviews with clean energy companies about their open innovation practices following interviews with their British equivalents at the end of last year.
- Joanne Zhang and Andy Cosh are examining the engagement and IP practices of a technology consultancy company.
• Tim Minshall is working on several related case studies. One project focuses on location and small firm innovativeness in East England. Another focuses on how firms change their location to benefit their innovation. Another examines how two public organisations and two private firms help start-ups from product development to commercialisation.
• Alan Hughes, Andrea Miña and Jocelyn Probert are working on case studies aimed at exploring how the UK can maximise the return to R&D at the sectoral level (Pharma, Construction, Digital IT and Energy).

| Outputs for New Modes of Innovation: Managerial and Strategic Business Practices and Open Innovation (UK-IRC) |
| Articles in refereed Journals | 1 2 3 5 7 16 18 28 29 34 35 36 38 41 42 43 44 45 |
| Conferences attended | 250 251 252 261 273 |
| Working Papers | 80 81 82 83 84 88 92 93 94 95 100 101 102 103 104 105 107 108 109 110 |
| Chapters in books | 51 54 55 72 74 75 76 |
| Workshops held/attended | 147 148 149 152 153 154 |
| Conference papers given | 155 156 157 158 159 160 161 171 172 173 174 174 175 179 222 230 231 232 233 234 235 236 238 239 240 0 241 245 246 247 248 249 |
| Consultancy and advice given | 325 329 330 |
| Mphil & PhD Students supervised | 350 358 359 360 361 362 363 |
| Collaboration with other research teams and membership of research networks | 143 144 |
| Media | 347 |
| Visitors | 319 323 324 |
| Membership of committee external to the university | 296 297 298 299 300 |
| Other publications | 111 121 |
The Knowledge Hub (UK~IRC)

Director of the Knowledge Hub: Michael Kitson  
Project dates: 2009-2014  
Funding: ESRC, NESTA, BIS, TSB

The Hub has continued its approach of systematic dialogue with key stakeholders and has forged a range of new alliances and partnerships, with partners in the UK and abroad.

The Hub has continued its knowledge exchange including a wide range of research on innovation (including collaborating with other projects commissioned as part of the initiative) and has developed links and relationships with other national and international institutions concerned with innovation policy and practice, including BIS, NESTA, the Technology Strategy Board, the CBI, the Council for Science and Technology, the OECD, the EU, CiHE (Council for Industry and Higher Education), DIME (Dynamics of Institutions and Markets in Europe), DRUID, EU PRO and Centre for Science and policy (CSaP).

In 2011 the Hub continued to regularly update the content of its website, including adding new sections, such as media coverage and working papers. There are regular mailings to the centre’s contacts database including newsletters and events news, as well as steady news flow through our Twitter account.

The Hub launched and promoted four major reports in the year, “Open Innovation Choices –What is British Enterprise doing?”, “Is the British Economy supply constrained? A critique of productivity pessimism”, “The UK R&D Landscape” and Hidden Connections: Knowledge exchange between the arts and humanities and the private and public and third sectors”

Through the centres associated research programmes there is now in place a regular, monthly, seminar series. There is also access to associated Working Papers on the UK~IRC’s website.

- The centre has held 13 dissemination and research development events over the year, which were attended by over 605 delegates. After all of our events we request feedback questionnaires to be completed, asking attendees questions such as what their objectives were for attending the event and if these were met. To date the feedback we have received on the events has been very positive. In addition to these specific event based questionnaires the Centre conducted a broader online questionnaire seeking feedback on all of its activities. The questionnaire was sent to the whole of the contacts database and received a 22% response rate. A summary of the responses can be found on the UK~IRC website at: http://ukirc.ac.uk/newsandevents/news/article/?objid=6924. Some of the results from the survey include:

- 68% of respondents strongly agreed or agreed that they had increased personal and professional development as a result of participating in UK~IRC activities

- 79% of respondents strongly agreed or agreed that they had new ideas on innovation policy and practice as a result of participating in UK~IRC activities

- 63% of respondents strongly agreed or agreed that they had experienced new research that can be used in their working environment as a result of participating in UK~IRC activities

- 66% of respondents strongly agreed or agreed that they had experienced a new network of contacts as a result of participating in UK~IRC activities
• 78% of respondents strongly agreed or agreed that as a result of their contact with the UK~IRC they always read new information about the UK~IRC when it is presented to them

• 63% of respondents are still in contact with people that they first met as a result of an UK~IRC activity or event

• 81% of respondents are sometimes or frequently involved with exchanging information activities with contacts made as a result of a UK~IRC activity

The Centre has sought to continue to increase its geographical and audience scope throughout the year. This has been done by the team by travelling a lot which includes Brussels, United States of America, India, Mexico, Slovenia, New Zealand, Palestine Territories and Northern Ireland. We have also looked to ensure a good reach within the UK by collaborating and co-producing events which has included locations such as Winchester, Strathclyde and Manchester.

The UK~IRC has through the Hub provided policy briefings and inputs into co-developed events with DCLG, BIS and TSB (in relation to innovation briefings, commentary on OECD innovation policy and impact evaluation respectively). The UK~IRC team have been involved in many briefings and had significant input into the Coalition Government’s Innovation and Research Strategy for Growth which launched on 8 December. The centre sponsored the launch or publication of 4 major policy reports and had an active Twitter page with 226 registered followers. The website has been used to highlight key events, news and insights from the centre and its partners. The UK~IRC also held its third Innovation Summit in December 2011.

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<th>Outputs for The Knowledge Hub (UK~IRC)</th>
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<td>Chapters in books</td>
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<td>Books</td>
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<td>Conference papers given</td>
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Services Innovation and Innovative Performances at the Sector Level in Business Services (UK~IRC funded project)

Project leader: Bruce Tether (Imperial)
Project Director: Alan Hughes
Project Investigators: Elif Bascavusoglu-Moreau, Andrea Mina, Bruce Tether
Other Principal Investigators: Andrea Mina (Cambridge), Alan Hughes (Cambridge), Stan Metcalfe (Cambridge), Ken Coutts (Cambridge), Bill Martin (Cambridge), Bob Rowthorn (Cambridge), Cher Li (Imperial)
Project dates: 2009-2014
Funding: ESRC, NESTA, BIS, TSB

This UK~IRC project is concerned with structural changes in the UK economy that have led to unprecedented growth in its service – and especially business service – component. The research programme includes analyses of firm behaviours, sectoral landscapes and the macro environment. The team has gathered new and original micro-data of important groups of under-researched professional services, including design, architecture and engineering businesses. This stream of research has led to a number of papers. Two of them are currently under review in leading journals and two are in preparation for future submissions. The academic dissemination strategy has been associated with direct involvement with practitioners. The team undertook an analysis of the design industry for the Design Council and the Department of Business Innovation and Skills which was well received. They have continued to work with the Architects’ Journal and New Civil Engineer to gain access to additional unique data on professional services in return for some analysis of this data. Work is also in progress to analyse the dynamics of structural change associated with the growth of services, and business services in particular, in the UK economy. Elif Bascavusoglu-Moreau has also continued work with Bruce Tether on the interaction between service and manufacturing activities in firms and the growth of servitisation strategies.

The UK~IRC work on Services was presented at numerous invited seminars, workshops and international conferences, including: the 2010 DRUID Conference in London (plenary session), DRUID 2011 at Copenhagen Business School; a conference on knowledge based services held in Rome in December 2010; 2010 and 2011 Academy of Management Annual Meetings (Montreal, 6-10 August 2010/San Antonio, Texas, 12-16th August 2011); seminars at NESTA and the University of Padua (March 2011); the Friedrich Schiller University/Max Planck Institute for Economics Seminar Series (Jena, 2 February 2011) INGENIO (Spanish Council for Scientific Research/Polytechnic, University of Valencia, 14 April 2011); the Workshop ‘Professional Services: Innovation and Practices’ UK-IRC and AIM Workshop, Imperial College London Business School, 10-11 March 2011. Forthcoming presentations include the 2012 International Schumpeter Conference, the DRUID Conference and the Academy of Management Meeting.

| Outputs for Services Innovation and Innovative Performances at the Sector Level in Business Services (UK~IRC funded Project) |  |
|---|---|---|---|
| Working Papers | 99 | Articles in refereed journals | 32 33 34 |
| Conference papers given | 229 230 231 232 233 234 |  |  |
Development of a Stock-Flow Consistent UK Macroeconomic Model for Policy Analysis

Project leader: Bill Martin
Project dates: ongoing

This work, which is part of the macro component of the UK~IRC Business Services project, follows in the tradition of stock-flow modelling pioneered by the late Professor Wynne Godley. The research is not publicly funded. The modelling is used to inform strategic macroeconomic policy analysis of the UK economy. The work also provides a top-down perspective relevant and complementary to research on the balance of payments, led by Ken Coutts and Bob Rowthorn as part of the Services project.

Since joining CBR in 2007, Bill Martin has written papers on the development of historical sector national accounts statistics, the theory of optimal policy using a stock-flow consistent model, and the econometric stability of a UK private expenditure function. He has constructed a simple macro model, which was used to develop scenarios in a policy-orientated report in 2010 focussed on the strategic challenges facing the UK. The report, published under the joint CBR UK~IRC imprint, received widespread press coverage. Bill Martin was invited to present his views to HM Treasury economists, to a BIS-ESRC seminar on the Government’s proposed White Paper on growth, to a private seminar organised by the Deputy Prime Minister, and to a seminar organised by Professor Arestis at St Catherine’s College, Cambridge.

In July 2011, Bill Martin’s second strategic report examined the proposition that the British economy was supply constrained. The report gave a detailed critique of the view, widely held in policy circles, that the economy had suffered a permanent loss of productivity. The analysis received widespread press coverage and prompted requests for additional briefing from economists at the Bank of England and BIS. The report also highlighted the role played by business services and banks during the downturn, analysis that feeds naturally into the UK~IRC funded investigation of the changing input-output structure of the economy, as part of the Services project.

In May 2012, Bill Martin and Bob Rowthorn co-authored a sequel to Bill Martin’s 2011 report, addressing criticisms of the earlier analysis and new arguments put forward by productivity pessimists. The sequel received widespread coverage in the UK and in the US – in addition to citations in major British papers (FT, Sunday Times, Observer, Guardian), magazines (The Economist, Prospect) and the Bank of England’s Quarterly Bulletin, the study was cited by Paul Krugman in the New York Times and by the IMF in its 2012 Article IV Report on the UK. UK officials were privately briefed.

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<th>Outputs for Development of a stock-flow consistent UK macroeconomic model for policy analysis</th>
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<td>Media</td>
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<td>Other Publications, e.g book reviews, pamphlets</td>
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Aims
Period: ongoing
Funding: ESRC; various other shorter term funds and contract research grants

Survey and Database Unit

Project Leader: Andy Cosh.
Survey and Database Manager: Anna Bullock.
Survey and Database Assistant: Isobel Milner.

Aims and Objectives

- To ensure the efficient design, management and costing of CBR project surveys including the CBR biennial survey of small and medium sized enterprises.
- To advise on questionnaire design, survey method, choice of sampling frames, and data inputting and cleaning procedures in CBR project surveys.
- To advise on statistical software use with CBR datasets.
- To archive data at CBR, and where appropriate organise the deposit of ESRC sponsored datasets with the UK Data Archive at Essex.
- To act as a technical advisor to other members of the CBR on the contents of and access to proprietary and official data sets, a great number (e.g. FAME, Datastream, ONS) of which are utilised by CBR staff.
- To oversee the continuing upgrading of the CBR User Database, so as to ensure that it becomes a central part of the new dissemination and communications strategy.

During the year 2011-12, the unit has been involved with a number of projects described below.

Survey of Small and Medium Sized Firms
The latest in the series of CBR UK SME surveys took place at from October to December 2011. Questionnaires were sent to the over 1,100 survivors from earlier panels and to a new sample of around 16,400 independent UK companies. The survey consisted of a 9 page postal questionnaire, which could either be returned by post or completed on the web. Over 1,900 responses, a response rate of around 11%. Collaboration with colleagues in University of Auckland Business School, New Zealand and University of Queensland Business School, Australia in the questionnaire design will make it possible to compare the survey results with surveys recently undertaken in New Zealand and Australia. Further work is in progress with Doshisha University, Kyoto, to extend the programme to include Japan and also the Shanghai area of China.

Funding Models, Research Performance and the Effects of the UK National Science System
The project reported on a comparison of the impact of different funding routes for public support of research in the UK, and included an analysis of the distribution of funding streams across the dual support system in the UK and of the relationship between the institutional receipt of such funding and the pathways to impact followed by individual academics in the UK. Some of the databases created as part of the project were:
- A database of HESA and Funding Council data by combining cross-sectional annual data from HESA on Research income by type for the years 2001/2 to 2010/11 by institution and cost centre and quality-related research (QR) funding data by institution and Unit of Assessment (UOA) by year using Funding Council Sources.
- Construction of RAE score and Research Grant variable for all UK HEIs which was added to the CBR Survey of Academics.
- Using the CBR academic survey to construct a matched database, consisting of research grant holders and non-grant holders.
The Connectivity of the Arts and Humanities: New Analysis of Missing Links
This research examines the role of the arts and humanities in the UK economy. It provides evidence on the connectivity of the arts and humanities, enhancing our understanding of knowledge exchange, the Creative Economy and cultural capital. There is significant evidence that academics from the arts and humanities in the UK are engaged in a wide range of interactions with a wide range of partners. In general, this does not take the form of technology transfer, but through other mechanisms which include people-based, problem-solving and community-orientated activities. The CBR survey of academics allowed respondents to provide individual comments about their academic life, motivations and knowledge exchange activities. In Module 1 the team analysed these responses using the Leximancer software, which is an analytical tool for evaluating unstructured, qualitative, textual data.

UK~IRC and CIHE Task Force: Enhancing Value: getting the most out of UK Research
The team undertook analysis of UK R&D data for the report on the UK R&D Landscape.

The Knowledge Hub (UK~IRC)
The team wrote a feedback survey on the impact of the UK~IRC’s knowledge hub activities, which was conducted as a web survey. The questions covered the following sections: UK~IRC Events; Post Event Contact; UK~IRC Future Developments; UK~IRC Website; UK~IRC Newsletter & other e-communication; and Demographics.

Dissemination of Survey Methods
The team gave a presentation to first year PhD students at the Business School on survey methods.

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<th>Outputs for Survey &amp; Database Unit</th>
<th>Surveys</th>
<th>Research Reports</th>
<th>Datasets created, Software written</th>
<th>Visitors</th>
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<td>Surveys</td>
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<td>133 134 135 136</td>
<td>320</td>
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<tr>
<td>Datasets created, Software written</td>
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Policy and Evaluation Unit

The CBR carries out policy relevant research under a number of research themes. In addition, the Policy Evaluation Unit at the CBR conducts short-term and long-term contract research in both the public and private sectors. The kinds of projects the Unit undertakes are: a range of evaluations and impact assessments of government initiatives in the areas of innovation, growth and finance; and analysis of the barriers and drivers of firm performance. These evaluations depend on using appropriate databases to develop and test models of company performance, often the result of complex survey design and execution for which the CBR has an international reputation. Some of the work of the Unit has been reported under the Evidence Base for Innovation Policy project above since it is closely related to that project.

Knowledge Exchange between Arts and Humanities and the Private, Public and Third Sectors: A comparative perspective; The Connectivity of the Arts and Humanities: New Analysis of Missing Links

Project leaders: Alan Hughes and Michael Kitson
Senior Research Fellow: Jocelyn Probert
Analysts: Anna Bullock and Isobel Milner
Project dates: 2011
Funding: Arts and Humanities Research Council

This research funded by the Arts and Humanities Research Council was carried out in 2011 and analysed the pattern, scope and impact of interactions between academics in the Arts & Humanities with external organisations in the private, public and third sectors. The research used the datasets created for the project ‘University-Industry Knowledge Exchange: demand pull, supply push and the public space role of higher education institutions’ to provide a detailed and comprehensive picture of such interactions in the UK and evaluates them in a comparative context with other disciplines. The research was based on three sources of data: first, the CBR survey of over 22,000 academics; second, the CBR survey of over 2,000 business enterprises in all sectors of the UK economy; third, a series of case studies of interactions between academics from the Arts and Humanities with other organisations. The academic survey contains details of the interactions and characteristics of 3,650 academics from the Arts and Humanities. The enterprise survey contains information on the range of interactions between the business community and the university sector, including an identification of interactions with different disciplines, including the Arts and Humanities. The case studies comprise an analysis of 33 interactions between academics from the Arts and Humanities with other organizations.

The report, the largest study of its kind to focus on the arts and humanities, reveals several key findings: the arts and humanities are highly connected within the UK economy; they have significant links to the private sector; the academic benefits of knowledge exchange; benefits to students and the issues surrounding knowledge exchange.

The report enhances the AHRC's understanding of the challenges and opportunities in knowledge exchange. It builds on and reinforces the work that the AHRC has undertaken in this important area and it will allow the AHRC to develop appropriate, evidence-based funding models and guidance.

The Connectivity of the Arts and Humanities: New Analysis of Missing Links

The success of the AHRC project above led to further funding for new work. This research examines the role of the arts and humanities in the UK economy. It provides evidence on the connectivity of
the arts and humanities, enhancing our understanding of knowledge exchange, the creative economy and cultural capital. The research consists of three modules.

Module 1 supplements the previous research by providing an analysis of large-scale qualitative data. In addition to providing responses which could be analysed using quantitative techniques, the CBR survey of academics allowed respondents to provide individual comments about their academic life, motivations and knowledge exchange activities. This module analysed these responses using the Leximancer software which is an analytical tool for evaluating unstructured, qualitative, textual data.

Previous CBR research covered surveys of academics and the private sector. Module 2 will complete that picture by undertaking a survey of cultural institutions. This survey will reveal, in combination with the previous surveys, the multiple connections of the creative economy, including arts and humanities research, cultural institutions and the creative industries. This will be the first UK-wide survey that focuses on these multiple links. This module will also form part of the foundation for the development of Module 3.

In the current period of austerity, there has been an increasing focus on the needs to rebalance the economy and achieve sustainable economic growth. There is widespread debate on how competitiveness can be fostered and increased. Traditionally, it has been argued that competitiveness can be improved through improvement in physical capital (through firms) and human capital (by improving the skills of workers). But there have also been arguments that skilled workers and physical capital tend to be concentrated in clusters because of the so-called benefits of 'agglomerations'. It is often argued that skilled workers (especially the 'creative classes') tend to be attracted to locations that have 'buzz'. Module 3 will examine how the arts and humanities (including academia) can contribute to such 'buzz' and so the competitiveness of locations.

| Outputs for Knowledge Exchange between Arts and Humanities and the Private, Public and Third Sectors: A comparative perspective; The Connectivity of the Arts and Humanities: New Analysis of Missing Links |
|---------------------------------------------------------------|-----------|--------------------------------------|------------------|------------------|------------------|
| Articles in refereed Journals                                | 19        | Conference papers given              | 210 211 212 213 214 215 |
| Conferences attended                                        | 262 263 264 265 266 | Chapters in books                    | 67 68 69          |
| Consultancy Advice                                           | 328       |                                      |                   |
Comparative Study of University-Industry Knowledge Exchange in the United States and the United Kingdom

Project Team: Alan Hughes, Barry Moore (PACEC), Tomas Ulrichsen (PACEC), Anna Bullock and Isobel Milner
Funding: HEFCE
Period: 2008-9 (extended to 2012)

Aims and Objectives
This project consists of three components. The first was carried out in 2008-9 and was designed to assess the extent to which HEFCE/OSI third stream funding has secured direct and indirect economic benefits, through embedding a culture and capacity within Higher Education Institutions (HEIs) that supports the transfer and exchange of knowledge between HEIs, business and the wider community. Following the completion of this original project HEFCE funded PACEC/CBR to carry out follow on research in 2009-11. This work deepened understanding of the role of knowledge exchange within the overall set of universities analysed and extended the analysis to the USA. The third component extends the to 2012 and is a scoping study of developments in the metrication of commercialisation and knowledge exchange practices in the USA innovation system and possible lessons for the UK.

Outputs for Project: Comparative Study of University-Industry Knowledge Exchange in the United States and the United Kingdom

<table>
<thead>
<tr>
<th>Chapters in books</th>
<th>66</th>
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</table>

Funding Models, Research Performance and the Effects of the UK National Science System
Principal Investigators: Alan Hughes and Michael Kitson
Analysts: Anna Bullock and Isobel Milner
Funding: BIS

This one year project funded by BIS was completed in July 2012. It reports on a comparison of the impact of different funding routes for public support of research in the UK. It includes an analysis of the distribution of funding streams across the dual support system in the UK and an analysis of the relationship between the institutional receipt of such funding and the pathways to impact followed by individual academics in the UK. It builds on the ESRC funded project on University-Industry Links (see above) which generated two large databases of academic relationships with external organisations and business interactions with universities. An interim report was submitted to BIS in February 2012 and a final report in July 2012. It is anticipated that this will be published by BIS in Autumn 2012.

Outputs for Funding Models, Research Performance and the Effects of the UK National Science System

<table>
<thead>
<tr>
<th>Chapters in books</th>
<th>14</th>
<th>Conference papers/presentations given</th>
<th>195 196 197 198 199</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership of Committees external to the University</td>
<td>295</td>
<td>Consultancy and Advice given (paid or unpaid)</td>
<td>327</td>
</tr>
</tbody>
</table>
Corporate Governance Programme: Director Simon Deakin

The Corporate Governance programme carries out a range of basic and applied research projects on issues affecting the governance, management and regulation of companies, including board structure, executive pay, hostile takeovers, shareholder activism, socially responsible investment, corporate insolvency, inter-firm contracting, worker participation, employment protection, and labour standards regulation. Under the aegis of the programme, researchers have provided advice and research support to a number of policy initiatives in the UK and overseas, including the DTI-sponsored review of UK company law which culminated in the passage of the Companies Act 2006, the EU’s consideration of options for the reform of working time regulation, and ILO work on labour standards in developing countries. The programme has contributed to advances in methods of data collection and statistical analysis in the study of the relationship between law and finance, and to theoretical developments in the field of evolutionary law and economics. Funding comes from, inter alia, the ESRC, the EU, and the UK and Japanese governments.

During 2011-12, projects on corporate governance and innovation, pension fund governance, gender inequality, and labour market capabilities were completed, and new work was begun on law and finance in emerging markets. Research continued on the relationship between ethics and globalisation. In the course of the year, funding was sought for two new major ESRC-funded projects, on labour law and poverty alleviation and law and finance in ‘rising powers’ respectively. These application were successful and the projects will begin in early 2013.

‘Capright’: Resources, Rights and Capabilities in Europe

Project leader: Simon Deakin
Research Associates: Catherine Barnard (CBR and University of Cambridge), Aristea Koukiadaki (CBR and Manchester Business School) and Frank Wilkinson (CBR)
Project Dates: 2007-11
Funding: European Union Sixth Framework Programme

Aims, objectives and results

This project was funded by the Sixth Research and Development Programme of the EU and coordinated by the IDHE-Cachan unit, based near Paris. The main contribution of the CBR was to undertake a series of case studies of employee information and consultation mechanisms in the context of corporate restructuring. The members of the CBR team also carried out work on the impact of transnational economic integration on the operation of labour standards at national and sectoral level, including an analysis of the law and practice relating to local labour clauses, and have worked on developing the theoretical framework for the project, which is draws on capability theory. The empirical parts of the project were completed in 2010 and the project formally concluded in 2011. On the basis of the theoretical and empirical work, a series of research outputs have been published in the past year as books, articles in peer-reviewed journals and edited collections of essays, among others.
<table>
<thead>
<tr>
<th>Outputs for Capright: Resources, Rights and Capabilities in Europe</th>
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</thead>
<tbody>
<tr>
<td><strong>Articles in refereed Journals</strong></td>
</tr>
<tr>
<td><strong>Working Papers</strong></td>
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<tr>
<td><strong>Conference papers given</strong></td>
</tr>
<tr>
<td><strong>Conferences attended</strong></td>
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</table>

**Law and Finance in Emerging Markets**

Project leaders: Simon Deakin (CBR) and John Hamilton (CBR)
Project dates: 2011-12
Funding: Legal Research Institute

The transition of former socialist countries to market-based forms of economic ordering over the past two decades provides an unprecedented opportunity to study the relationship between legal institutions and economic development. In the early 1990s there was a broad consensus among economists that legal institutions had played a critical role in fostering economic growth in the west. In particular, legal protection for property and contract rights was seen as essential for supporting private exchange and business enterprise. In the context of post-socialist systems, this led to a preference for private law over regulation as an instrument for promoting economic growth. At the same time there was a recognition that in transition systems, weak legal institutions posed a potential barrier to growth. This led to a preference for legal rules which would as far as possible be self-executing (as in the case of Russia’s ‘self-enforcing’ corporate law), and which involved minimal interpretive discretion on the part of the courts or officials (‘bright line rules’). In addition, policy makers sought to remove the legacy of centralized control of the economy, through programmes of privatization and deregulation. This was seen as a precondition for the emergence of market-based economic relations, which would give rise, in turn, to demand for stable and well functioning legal institutions. In short, legal development was expected to be the consequence of economic growth, as much as its cause. Two decades on, transition systems have, in varying degrees, been adapted to the model of the market economy which policy-makers envisaged for them. The nature of the transition they are undergoing nevertheless remains unclear in a number of respects. In particular there is uncertainty over how far the legal system has achieved autonomy from the political sphere and from economic interests. More generally, the quality of legal institutions remains a matter for concern. If the assumptions which drove policy-making in the 1990s are correct, the legal system should become more effective over time, as an outcome of sustained economic growth. An alternative scenario is one in which legal institutions remain limited in their capacity to support market relations, thereby constraining economic development.

The current project has the following aims:

1. To analyse how far law and legal institutions can promote economic growth in the rising power and other emerging markets.
2. To analyse processes of legal and institutional reform in relation to financial markets and corporate governance in the rising powers and emerging markets.
3. To identify how far under-development of formal legal institutions is posing a barrier to future growth in the rising powers and other emerging markets.

The work of this project will take the form of a review of relevant secondary sources on the role of law in promoting economic development in emerging markets, and an analysis of relevant law reform initiatives in one or more countries. Two research papers are currently being prepared for publication in the CBR working paper series and in a refereed journal or collection of edited essays. The work will feed into the ESRC-funded project on Law, Development and Rising Powers, which will commence in April 2013.

**Corporate Governance and Innovation**

Project leaders: Simon Deakin (CBR) and Andrea Mina (CBR)
Project dates: 2010-11
Funding: Japanese Ministry of Education COE grant to ITEC, Doshisha University, and the CBR

**Aims, objectives and results**

In this project, funded by the COE grant to ITEC, Doshisha University, Simon Deakin and Andrea Mina carried out a review and synthesis of the link between corporate governance and innovation. Innovation has been identified as an engine of growth in different areas of research in economics, business and management and its positive effects have been theorised and observed at different levels of aggregation. Many gaps in the literature remain on the finer mechanisms through which specific institutional arrangements influence and are influenced by innovation and the policy and business challenge of aligning the legal framework and the needs of innovation-driven growth. In the field of law and economics, a growing body of work is looking at the relationship between firm-level corporate governance arrangements and the institutional framework at the level of company and employment law. The legal origins hypothesis maintains that the legal infrastructure of a given country – its constitution, its court system, the nature of its legislature, and the structure of the legal professions – shapes the content of its laws on, among other things, corporate governance, with consequences for economic development. The connection between the two debates – innovation on the one hand, and corporate governance on the other – has remained under-researched relative to other aspects of the broad legal framework that constrains and enables firm behaviour (for example, in comparison with intellectual property rights). In their synthesis paper, Deakin and Mina review the theory and evidence of the interaction between corporate governance and innovation, develop a specific set of hypotheses, illustrate how they can be addressed, and suggest avenues for further research which can significantly enrich the current debate on the knowledge (or ‘learning’) economy. The work was completed in 2011 and will be published later in 2012 as a contribution to a volume of papers on law and innovation.

**Outputs for Corporate Governance and Innovation**

| Articles in refereed Journals | Ch casino books | 58 62 63 73 |
| Working Papers | 89 91 106 | Books | 47 |
Pension Fund Governance and Socially Responsible Investment

Project Leader: Simon Deakin
Research Associates: Ajit Singh (CBR), John Buchanan (CBR), Dominic Chai (CBR and University of Manchester), Andrew Johnston (CBR and University of Queensland) Sue Konzelmann (CBR and Birkbeck College, London), Prabirjit Sarkar (Jadavpur University and CBR), Wanjiru Njoya (CBR and LSE)
Research assistants: Akio Hoshi, Berk Demirkol, Emilie Aguirre, Yin Harn Lee and Roseanne Russell
Project Dates: 2007-11
Funding: Belspo (Belgian Science Policy Foundation); additional funding from the Japanese Ministry of Education COE grant to ITEC, Doshisha University, and the CBR

Aims and Objectives

This project, funded by the Belgian Science Foundation (Belspo), examined issues of pension fund governance and socially responsible investment (‘SRI’) from the perspective of reflexive governance theory, with the CBR working as part of a network with teams from the Catholic University of Louvain and the University of Liège. The work began in 2007 and was completed in 2012. The CBR team carried out empirical research on pension fund governance and activism, as well as more general theoretical and policy-related work on the future of pension fund and corporate governance.

Results

(i) The trust model of pension fund governance

In 2011 John Buchanan and Simon Deakin continued to work on the evolution of the trust model in pension fund governance (Buchanan and Deakin, 2012). Their work shows that the adequacy and sustainability of pension provision in the UK have increasingly been questioned in recent years. Pressures are coming from all sides: increased regulation, new accounting standards (FRS17), the emergence of deficits, takeover bid activity, pension scheme abandonment, and the emergence of a pension fund buy-out market. Trustees therefore find themselves at the focal point of often contrary forces. Adding to the difficulties, a large number of defined benefit schemes are closing to new members, and/or terminating defined benefits for existing members. The development of the model at some DB schemes nevertheless demonstrates that it can adapt. Corporate trustees with executive officers and specifically empowered committees have emerged at larger companies, where the sponsor can make such resources available, to deal better with the complications of the current pensions environment. Practices, such as division of supervision and execution, have been copied from corporate governance and appear to be functioning well at some schemes. Both the larger schemes and some smaller schemes are beginning to employ professional trustees, moving the style of their trusts away from the tradition of prudent amateurs towards the specialist skills that are increasingly demanded by the Pensions Regulator.

In addition, Rosanne Russell carried out background research on the implications for pension fund governance of changes to retirement law and practice in the UK. The results of this work will be written up with Catherine Barnard and Simon Deakin in a paper later in 2012.

(ii) Pension funds and infrastructure investment

During late 2011 and early 2012, Simon Deakin and John Buchanan carried out research on the issue of pension fund investment in large-scale infrastructure projects and in projects with a long-term, innovative orientation. The ability of institutional investors to take a balanced view of the risks and returns inherent in projects with the potential to generate long-term value has recently been called into question. The UK’s National Infrastructure Plan of November 2011 noted that in the face of
disruptions to traditional sources of finance such as bank lending for essential infrastructure, ‘few institutional investors have developed the capability to assess direct investment opportunities in individual infrastructure projects’. Undertaking to seek remedies to this situation, the UK government has targeted the raising of up to £20,000 million from UK pension funds and other investors for investment in long-term projects in infrastructure. The CBR research, based on interviews conducted in late 2011 and early 2012, suggests that there is a gap between the financing demands of infrastructure providers and the conditions that pension funds and other institutional investors are willing to entertain, which is only partially bridged by the structures of intermediary bankers and specialist fund managers (Buchanan, Deakin and Sanderson, 2012).

(iii) Shareholder activism and corporate governance in comparative perspective

In 2011, John Buchanan, Dominic Chai and Simon Deakin completed their comparative study of shareholder activism in Japan, Europe and the US. This research was by CUP as a research monograph (Buchanan, Chai and Deakin, 2012). The work focuses on what happened when American and British confrontational hedge fund activists targeted Japanese companies between 2002 and 2008, they were dealing with joint stock companies with shareholder voting powers and other levers of power already familiar to them from the USA and Europe. The formal rights of shareholders in Japan were more or less as strong as those prevailing in the USA. Corporate law was based heavily on the US model. Scepticism about post-War Japanese corporate governance practices had been widely aired and had support from the trade and industry ministry METI. There was enthusiasm in some quarters for ‘global’ standards which to many Japanese and overseas observers implied a willingness to follow the USA’s lead. Despite this apparently welcoming situation, confrontational hedge fund activism produced equivocal results from the point of view of investment returns and failed, more generally, to bring about acceptance of the shareholder primacy norm among corporate and financial actors. The main immediate causes of this failure were the intransigence of boards and the indifference of powerful local shareholders to the hedge funds’ strategies. Directors were often willing to listen to the funds’ arguments with an open mind, but their cooperation stopped as soon as they discerned that immediate, short-term gain, rather than the long-term benefit of the community firm, was the funds’ objective. The beliefs held by managers and local shareholders about the purposes of the community firm led them to interpret formal governance structures in a way which was at odds with expectations the funds had derived from their home country experience. When arguments about the legitimacy of the funds’ interventions were brought before the courts, it was made clear that the idea of the community firm had resonance within the legal system.

(iv) Comparative analysis of CSR and corporate governance regulation

In other work for the project, Andrew Johnston’s recent research has addressed the theme of the role of CSR-related practices in reducing negative externalities arising from corporate activity, and on the corporate governance of credit rating agencies. He has also conducted a study of the role of the recent EU regulation on credit rating agencies (Johnston, 2011). Sue Konzelmann’s recent work on compaartive corporate governance shows that within the sphere of Anglo-Saxon capitalism, some countries have emerged virtually unscathed from the global financial crisis: while the US, UK and Ireland were very badly affected by the crisis, Canada, Australia and New Zealand were not (Konzelmann et al., 2010). Wanjiru Njoya has carried out a study of the role played by employees in ownership and control of the firm and how this influences firms’ selection of jurisdiction in which to incorporate. The framework of reflexive governance at European level allows mechanisms such as codetermination to achieve a more sustainable balance between employee and shareholder interests (Njoya, 2011). Simon Deakin and Prabrjijit Sarkar have carried out quantitative analysis of the relationship between corporate governance regulation and economic outcome in a range of countries, developing further the ‘leximetric’ coding techniques used to measure cross-country
differences in legal régimes, and adding to the CBR’s existing databases with the help of research assistants with expertise in comparative corporate governance (Akio Hoshi, Berk Demirkol, Emilie Aguirre, Yin Harn Lee). Their work with Ajit Singh was presented at the IEA World Congress in Beijing in July 2012 and will appear in a forthcoming collection of proceedings of the congress (Deakin, Sarkar and Singh, 2012).

<table>
<thead>
<tr>
<th>Outputs for Pension Fund Governance and Socially Responsible Investment</th>
<th>Articles in refereed Journals</th>
<th>Chapters in books</th>
<th>Other Publications, e.g. book reviews, pamphlets</th>
<th>Collaboration with other Research Teams</th>
<th>Mphil &amp; PhD Students supervised</th>
<th>Conference papers given</th>
<th>Media Coverage</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>11 20 21 23 24 25 37</td>
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<td>140</td>
<td>354</td>
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<tr>
<td>Working Papers</td>
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<tr>
<td>Conferences attended</td>
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</tbody>
</table>
3. Outputs

(Note: work forthcoming in reporting year 2011-12 is listed here but not included in the Performance Indicator Table, section 9, below)

Articles in refereed journals


40


Books


Chapters in Books


**Research Reports**


**Working papers**


88. Criscuolo, P., Salter, A. ter Wal, A. ‘The role of Proximity in Shaping Knowledge Sharing in Professional Services Firms’


102. Paananen, M. Laursen, K. and Salter A. ‘Profiting from Openness: Exploring the Relationship Between Profits and Openness Among Innovating Firms’


Other publications (eg) Book Reviews, pamphlets


112. Connell, D submitted two tranches of written evidence to the House of Commons Science and Technology Committee Inquiry on Bridging the “Valley of Death”: Improving the Commercialisation of Research, and gave oral evidence to the committee on 18th April 2012.


114. Cosh, A. and Zhang, J.J. “Open innovation – finding the facts behind the hype.” Top Floor (CBR Newsletter


123. Mina, A. 3.2 Venture Capital in Europe by Andrea Mina, Henry Lahr (November 2011)

124. Mina, A. 3.4 Business experimentation through corporate venture capital by Andrea Mina, Jocelyn Probert, Stan Metcalfe (April 2011)

125. Mina, A. 3.5 The demand and supply of external finance for innovative firms by Andrea Mina, Henry Lahr, Alan Hughes (August 2011)


128. Mina, A. 3.9 Coaching or Selection? Venture Capital and Firms’ Patenting Performance by Henry Lahr, Andrea Mina (February 2012)


**Surveys**


**Datasets created, software written**


**Collaboration with other research teams and Membership of Research Networks**

137. Connell, D had meetings with 18 senior government and EU officials and directors of major UK companies visiting Cambridge under the Centre for Science and Policy’s Policy Fellowship programme.

138. Connell, D At EU level, the proposals has made for €1 billion a year of the EU’s R&D programme to be dedicated to funding a US style Small Business Innovation Research programme, were substantially adopted in the Commission’s Horizon 2020 proposals published in October 2011. This followed meetings he had with Máire Geoghegan-Quinn, Commissioner for Research and Innovation, and Vice President Tajani in Strasbourg in 2010 to explain these proposals, and a subsequent presentation to the European Competitiveness Council (comprising ministers from EU member states) in Budapest in April 2011.

139. Cosh, A. 2012 Consultant on project for the Food Standards Agency on SME Segmentation
140. Konzelmann, S. I coordinated the International Network on Varieties of Liberalism which produced the book, identified above under ‘Books’.

141. Koukiadaki, A., Deakin, S. Membership of the Voices at Work research network

142. Mina, A. Open University, Sant’Anna School of Advanced Studies, Polytechnic University of Marche, Economics Institute (Petr Zemcik), University of Bordeaux, University of Sussex.

143. Minshall, T. Establishment of collaboration with National Taiwan University of Science and Technology on topics related to open innovation in the medical device sector.

144. Minshall, T. Membership of University of Birmingham-coordinated and EC-funded UK:China “High Value Engineering Networks”: lead for tasks relating to (1) open innovation and university-industry transfer and (2) open innovation and emerging renewable energy technologies. In addition to University of Birmingham, partners include Tsinghua University, Technical University of Denmark and Zhejiang University.

145. Theyel, N. is presently in California carrying out a series of interviews with clean energy companies about their open innovation practices following interviews with their British equivalents at the end of last year.

146. Zhang, J. and Cosh, A. are examining the engagement and IP practices of a technology consultancy company.

**Workshops held/attended**

147. Alexy, O. External Seminar Series, University of Southern Denmark, Odense, October 2011

148. Alexy, O. 10th International Workshop on Open and User Innovation (Paper), Boston, July 2012


150. Cosh, A. 10th November 2011 Royal Society, London Roundtable Discussion on Open Data and Economic Competitiveness

151. Cosh, A. 9th February 2012 Imperial College London, Open Innovation in small firms: Positive step or costly mistake? Professor Jim Love (Birmingham University) and Professor Stephen Roper (University of Warwick)


154. Salter, A 25-26 June - Open Innovation: New Insights and Evidence Conference, Imperial College London - co-organised by Ammon Salter – 80 people, 2 day conference with papers from the world’s leading open innovation scholars including Henry Chesbrough.
Conférence/Papier de conférence/Présentation

155. Alexy, O Citius, Altius, Fortius
Druid Conference, Copenhagen, June 2012


157. Alexy, O Ethical Considerations in Internet Code Reuse
Academy of Management Conference, San Antonio, August 2011

158. Alexy, O Cui Bono
Academy of Management Conference (Regular Paper), San Antonio, August 2011

159. Alexy, O Open for Ideation
EURAM Conference, Rotterdam, June 2012

160. Alexy, O DRUID Conference, Copenhagen, June 2012

161. Alexy, O The Emergence of Openness
Research Policy Special Issue Conference on Open Innovation, Imperial College, London, June 2012


164. Bullock, A. and Milner, I. presentation on survey methodology to 1st year PhD students at JBS on 1 November 2011

165. Connell, D was asked to speak at seminars organised by the European Parliament in Brussels in February and April 2012 and at the European Science Open Forum in Dublin in July.

166. Connell, D presentations to a seminar on innovation policy challenges in Glasgow organized by the University of Strathclyde in September 2011 and on the US Innovation System at a meeting of the Centre for Business Innovation’s Open Innovation Practitioners’ Consortium involving representatives from major European companies which took place in Berlin in July 2012.

167. Connell, D made presentations during the period to visiting delegations from Mongolia and Mexico.


169. Cosh, A. UK~IRC Summit November 2011. The summit included a session on Open Innovation with speakers from GSK, IBM, 100% Open and the UK~IRC (Andy Cosh).


180. Hughes, A. spoke at CIHE Task Force Steering Group Meeting, BP, 1 St James’s Square, London, 26 June.


186. Hughes, A. gave a 10 minute presentation followed by Q&A session at Growth and Innovation System Conference, Medical Research Council, London, 13 January.


198. Hughes, A. (2011), University-Industry Links and Impacts Analysis, HEFCE Seminar, Centre Point, 19 October.


208. Hughes, A. was a discussant at an annual 'Mutual Learning Event' for the representatives of the European Research Advisory Committee (ERAC – formerly CREST) (Session: Combining supply- and demand-side measures to stimulate business investments in new technologies and innovative products) On 24th January 2012.


246. Theyel N and Cosh A “Open Innovation - a Gold Mine or Fool’s Gold for Young Firms?” (Academy of Management, Boston, MA (August 2012))

International Doctoral Conference, Doshisha University, Kyoto, Japan (February 2012)
Winter Doctoral Conference, Cambridge Judge Business School, UK (December 2011)

247. Vernet, A., Salter, A., Kilduff, M., Catching the wave, the role of closure in an individual’s ability to recognize opportunities, External Seminar Series, Management Department, University of Bologna, Italy, 15 May 2012


Conferences attended

250. Alexy, O Academy of Management Conference (Regular Paper), San Antonio, August 2011

251. Alexy, O DRUID Conference, Copenhagen, June 2012


254. Cosh, A. 30 Sept 2011 Event for John Dodds Head of innovation, BIS, Queens’ College, Cambridge


257. Hughes, A. attended CIHE/BIS Meeting at Graeme Reid’s Office at BIS, 1 Victoria Street, London


259. Hughes, A. attended UK~IRC Summit, IBM Hursley, Winchester.
260. Hughes, A. attended ESRC Investment Directors Meeting at Aston University, Birmingham


262. Kitson, M. Innovation policy challenges in Europe’s regions, University Strathclyde and UK-IRC, 16 September 2011

263. Kitson, M. Strategic Innovation: Cultivating Innovation in Strategic Public-Private Sector Partnerships, Birzeit University, Palestine Territories, 15 October, 2011


266. Kitson, M. UKIRC Summit


274. Salter, A. Industry Fellows Forum, October 2011, New Jersey

275. Salter, A. Global Economic Symposium, October 2011, Keil


278. Salter, A. Academy of Management, August 2012, Boston Membership of Committees external to the University

279. Salter, A. European Commission, member of High-Level Panel on the Measurement of Innovation

280. Salter, A. Member of DRUID Scientific Advisory Board
281. Salter, A Occasional reviewer for: Building Research and Information; California Management Review; Construction Management and Economics; Economics of New Technology and Innovation; Industrial and Corporate Change; Industry and Innovation; International Journal of Innovation Management; International Journal of Technology Management; Management Science; Organization Science; R&D Management; Regional Studies; Research Policy; Science and Public Policy; Strategic Management Journal; Technology Analysis and Strategic Management

282. Salter, A Reviewer for the UK’s Economic and Social Research Council (ESRC); Engineering and Physical Sciences Research Council (EPSRC); Italian Ministry of Education, University and Research; Iceland Research Council; and Social Sciences and Humanities Research Council (SSHRC) of Canada

283. Salter, A Consultancy includes: The Royal Society; Department for Innovation Universities and Skills; W S Atkins; Arup, Laing O’ Rourke; Department of Trade and Industry; Office of National Statistics

284. Salter, A Associate Editor, Industry and Innovation (2006-present)


Membership of Committees external to the University

287. Connell, D is a member of the advisory team for the Labour Party’s review of industrial policy and a member of the Small Business Task Force set up by the Leader of the Opposition Ed Miliband. He led the research programme for the sections of its forthcoming report on Innovation, Procurement and Exports. He has had several meetings with members of the shadow industry team including Chuka Umunna MP, Chi Onwurah MP and Toby Perkins MP. He also arranged visits to Cambridge for Ed Miliband, Chuka Umunna and Chi Onwurah so they could see at first hand the operations one of its most successful companies, TTP Group plc.

288. Connell, D was a member of the NHS East of England Innovation Council, NHS Midlands and East SBRI Management Board and NHS SBRI Task And Finish Group. The last was established to help implement the recommendations made by Sir Ian Caruthers report in his Innovation, Health and Wealth report.

289. Connell, D was a member of the Cambridge IKC Technology Panel.

290. Cosh, A. Council member of the Institute for Small Business and Entrepreneurship

291. Cosh, A. External Examiner at Cranfield School of Management

292. Hughes, A, member, Lead Expert Group for Foresight Future of Manufacturing Project

293. Hughes, A, member, Patents Expert Advisory Group

294. Hughes, A, member, EPSRC Strategic Advisory Network

295. Hughes, A. Member, German Excellence Initiative
Minshall, T. Member of the Innovation and Emerging Technologies Policy Panel of the Institution of Engineering and Technology (IET)

Minshall, T. Member of the Colworth Science Park Steering Committee

Minshall, T. Member of the Board of St John’s Innovation Centre Ltd.

Minshall, T. Member of the College of Referees for the R&D Management Association (RADMA).

Minshall, T. Member of the PICMET Proceedings Review Board.

Visitors

(a) UK

Cosh, A, visit by Vicky Morgan MP to discuss the Commercialisation of SMEs on 2\textsuperscript{nd} March 2012

Cosh, A, met with Heseltine Review panel on 11\textsuperscript{th} July 2012

Hughes, A. met with Lord Sainsbury in Cambridge on 6\textsuperscript{th} September

Cosh, A. Met with Andrew Thompson Chief Executive of Association of Colleges in the Eastern Region (1 day) on 25\textsuperscript{th} January 2012

Hughes, A. met with Ben Martin, University of Sussex, in Cambridge on 25\textsuperscript{th} January

Hughes, A. had a meeting with Alan Pitt, Council for Science and Technology, in Cambridge 6\textsuperscript{th} September

Hughes, A. had a meeting with Technology Strategy Board to visit IRC in Cambridge (Mark Glover (Business Planning), David Bott (Innovation Progs) and Paul Mason (Head of Development)) 20\textsuperscript{th} September

Hughes, A. had a meeting with Serge Plattard (Science and Technology Counsellor, French Embassy, London) in Cambridge 28\textsuperscript{th} September

Hughes, A. had a meeting with Chris Brown, Prime Minister’s education adviser, to discuss universities and growth and innovation in Cambridge 30\textsuperscript{th} September

Hughes, A. had a meeting with John Dodds, BIS Head of Innovation, and Michael Kitson, Ammon Salter and Andy Cosh in Cambridge

Hughes, A. had a meeting in connection with the Indian Admin Service Programme with the Secretary and Joint Secretary (Training) of the Indian Department of Personnel and Training 10\textsuperscript{th} November

Hughes, A. had a meeting with Rob Sullivan (Chief Executive of Broadband Delivery UK, Department of Culture, Media and Sport) 22\textsuperscript{nd} November
313. Hughes, A. had a meeting with Rohan Silva (Senior Policy Adviser, Prime Minister’s Policy Unit, 10 Downing Street) in Cambridge 25th January

314. Hughes, A. had a meeting with Keith Smith in Cambridge.

315. Hughes, A. had a meeting with Sydney Pen (Researcher at Industrial Economics and Knowledge Centre (IEK) of Industrial Technology Research Institute (ITRI), Taiwan, in Cambridge 3rd May

316. Hughes, A. had a meeting with Dr Richard Cawley (Senior Economic Advisor, Financial Engineering Unit, EC Directorate-General for Research & Innovation) in Cambridge 22nd May

317. Hughes, A. had a meeting with David Sainsbury and David Docherty, CIHE, in London 30th May

318. Hughes, A. Panos Desyllas was a CBR visitor from 30 September 2011 for three months

319. Salter, A was visited by Professor Maryann Feldmann, S.K. Heninger Professor of Public Policy, University of North Carolina, 17-21 October 2011

(b) Overseas

320. Hideki Tanaka from Doshisha University, Kyoto, Japan visited the survey and database team for 5 months from November 2011 to observe and assist with the CBR SME survey.

321. Dr Asako Okamura, Center for Research and Development Strategy, Japan Science and Technology Agency

322. Hughes, A. took part in a meeting between the Council for Science and Technology and the Haut Conseil de la Science et de la Technologie, Maison de la Recherche, 54 rue de Varenne, Paris 12th January

323. Patrick Schmithausen (RWTH Aachen University, Germany). Investigation of approaches to publicly-funded support for open innovation in product-based start-ups.

324. YiWen Yang (National Taiwan University of Science and Technology). Investigation of role of social media in supporting open innovation.

User Contacts

Consultancy and Advice given (paid or unpaid)

325. Bascavusoglu-Moreau E. Role of registered design on business performance - Intellectual Property Office (with Bruce Tether)


327. Hughes, A. German Excellence Initiative: Assessment of RWTH Aachen University 9-11th January

328. Kitson, M Advice on innovation Policy, DETI, Northern Ireland
329. Minshall, T. Unpaid Advisory Board member for 100%Open (open innovation consultancy spun-out from NESTA)


**Media Coverage**

(a) **Newspapers**


http://blogs.ft.com/economistsforum/2012/03/#axzz1rfBQeTTt.

http://blogs.ft.com/economistsforum/2012/03/#axzz1rfBQeTTt

334. Martin, Bill, The Sunday Times, 27th May, David Smith, “Britain has plenty of capacity for growth”; available at David Smith’s EconomicsUK.com website: 
http://www.economicsuk.com/blog/001673.html#more

http://www.guardian.co.uk/business/2012/may/27/recession-inflation-weaken-demand

http://www.bbc.co.uk/news/business-18259036

337. Martin, Bill, Financial Times, 1 June, Martin Wolf, “Too Much Gloom over British Productivity 
http://www.ft.com/cms/s/0/abf4c00c-a9b511e1977200144feabdc0.html#axzz1wQrTGOfo

http://krugman.blogs.nytimes.com/2012/06/01/poor-mouthing-britain/

339. Martin, Bill, Observer, 3 June, William Keegan “Support? Criticism? The IMF’s view of the UK offers something for everyone”
http://www.guardian.co.uk/business/2012/jun/03/support-criticism-uk-imf

http://www.economist.com/node/21557779

341. Martin, Bill, Prospect, October 2012, Gavyn Davies “The Unfortunate Mr Osborne”.

61
342. Mina, A. Research*eu Results magazine, Issue 5, September 2011

343. Mina, A. Bloomberg, 31 January 2011

344. Mina, A. Financial News, 3 February 2012

345. Mina, A. Financial Times, 3 February 2012

346. Mina, A. Independent, 5 February 2012

347. Minshall, T. “The Big Picture: driving research out of its ivory tower” The Manufacturer 5/03/12

(b) TV/Radio

348. Mina, A. BBC Radio 4 Today Programme, 2 February 2012

349. Deakin, S. interview on hedge fund activism in Japan for BBC World Service.

MPhil & PhD students supervised (incl.topic)

350. Alexy, O supervised Samir Sinha (Imperial College), Atos – Profiting from innovation

351. Cosh, A. supervised Nelli Theyel, Open innovation in the clean energy sector

352. Cosh, A. supervised Vivian Tsai, Innovation policy in pharmaceuticals

353. Cosh, A. supervised Joanne Jia, Comparison of private equity and corporate acquisitions

354. Deakin, S. Supervised Viviana Mollica (Law, Ph.D.) European corporate governance, Alysia Blackham (Law, Ph.D), Samuel Dahan (Law, Ph.D.) and Fotis Vergis (Law, Ph.D)

355. Deakin, S. supervised Alysia Blackham (Law, Ph.D.), age discrimination.


357. Deakin, S. supervised Samuel Dahan (Law, Ph.D), European social policy and the financial crisis.

358. Minshall, T. Supervised Luz Rincon (PhD) – The impact of open innovation intermediaries on links between R&D and Marketing

359. Minshall, T. Supervised David Weiss (PhD) – The role of location on the implementation of open innovation in UK SMEs

360. Minshall, T. Supervised Joonmo Ahn (PhD) - The Influence of the CEO Characteristics on Open Innovation Adoption and Performance in SMEs: The Case of Korea
361. Minshall, T. Supervised Bettina Blasini (PhD) – Communication and the development of innovation clusters

362. Minshall, T. Supervised Keith Cotterill (PhD) – Comparison of attitudes to entrepreneurial failure in UK, Germany and US

4. Staff

Below is a list of academic and support staff in post between August 2010 and July 2011 (name, research programme(s), grade, and the destination of staff leaving the CBR since that date, where known)

Research Staff

Elif Bascavusoglu-Moreau, Enterprise and Innovation Research Fellow
John Buchanan, corporate governance, Research Associate
Anna Bullock, enterprise and innovation, corporate governance, Survey and Database Manager
David Connell, enterprise and innovation, Senior Research Fellow
Andy Cosh, enterprise and innovation, corporate governance, Assistant Director
Simon Deakin, corporate governance, Assistant Director
John Hamilton, corporate governance, Senior Research Fellow
Alan Hughes, enterprise and innovation, corporate governance, Director
Michael Kitson, enterprise and innovation, Assistant Director
Isobel Milner, enterprise and innovation, corporate governance, Assistant Database Manager
Andrea Mina, enterprise and innovation, Senior Research Fellow
Jocelyn Probert, enterprise and innovation, Senior Research Fellow
Joanne Zhang, enterprise and innovation, Research Fellow

Administrative Staff

Irm Hahne, Director’s PA
Liz Hewitt, Administrative Secretary
Philippa Millerchip, UK~IRC Events Coordinator
Rachel Wagstaff, Secretary
Louis Wenham, Accounts Clerk (employed via University Financial Agency)

5. Visiting Fellows

Professor Yoshifumi Nakata
Director-General, ITEC, Doshisha University, Japan.

Professor Kazuhiro Taniguchi
Professor of Management and Economics at Keio University, Japan, and a Visiting Scholar at Nankai University, China.

Professor Ryoko Sakuraba
Associate Professor of Law, Kobe University, Japan

Dr. Virginie Xhauflair
Research Fellow, LENTIC, University of Liège, Belgium
6. Research Associates

Research associate status may be conferred on project leaders and members of projects who do not otherwise have a position in the CBR, and to former members of the CBR research staff who are still involved in the relevant projects. This category includes personnel in other University of Cambridge departments as well as from outside the University of Cambridge; these affiliations are indicated below. The following were research associates in the period 2009-10 (University of Cambridge unless otherwise stated):

John Armour (University of Oxford)
Catherine Barnard (Faculty of Law)
Dominic Chai (Korean National University)
Brian Cheffins (Faculty of Law)
Ken Coutts (Faculty of Economics)
Panos Desyllas (University of Manchester)
Graham Gudgin (Regional Forecasts Ltd)
Paul Guest (Birkbeck, University of London)
Xiaolan Fu (University of Oxford)
Antara Haldar (Columbia University)
John Hamilton (CBR)
Jonathan Haskel (Imperial College, London)
Jonathan Hay (Law Reform Institute, Washington DC)
John Hendry (Birkbeck, University of London)
Andrew Johnston (University of Queensland)
Ian Jones (Brasenose College, Oxford and London Business School)
Jodie Kirshner (Faculty of Law)
Martin Kilduff (Judge Business School)
Michael Kitson (Judge Business School) Now Assistant Director
Suzanne Konzelmann (Birkbeck, University of London)
Aristea Koukiadaki (University of Manchester)
Colm McLaughlin (University College, Dublin)
Bill Martin (former Chief Economist UBS Global Asset Management, member of the Financial Services Consumer Panel)
Ron Martin (University of Cambridge, Department of Geography)
Viviana Mollica (Durham University)
Stan Metcalfe (CBR)
Barry Moore (PACEC)
Tim Minshall (Cambridge Entrepreneurship Centre)
Yoshi Nakata (Doshisha University, Kyoto, Japan)
Wanjiru Njoya (London School of Economics)
Stephen Pratten (King’s College, London)
Bob Rowthorn (Faculty of Economics)
Ammon Salter (Imperial College, London)
Paul Sanderson (Department of Land Economy)
Prabirjit Sarkar (Kolkata University)
Gerhard Schynder (Kings College, London)
Samantha Sharpe (CBR)
Mathias Siems (Durham)
Ana Siqueira (Graziadio School of Business and Management, Pepperdine University)
Ajit Singh (Faculty of Economics)
Keith Smith (Imperial College, London)
Rod Spires (PACEC)
Bruce Tether (University of Manchester, Institute of Innovation Research and Business School)
Simon Turner (UCL)
Tomas Ulrichsen (PACEC)
Antoine Vernet (Imperial College London)
Hugh Whittaker (Doshisha University and University of Auckland)
Frank Wilkinson (Birkbeck, University of London)

7. Advisory Board

(as of 31 July 2012)

Dr Gerald Avison
The Technology Partnership

Kate Barker CBE
Chair
Senior Advisor to Credit Suisse

Dr Steve Brawley
Chief Executive
Joint Industry Board for the Electrical Contracting Industry

Dr Andy Cosh
Assistant Director
Centre for Business Research
University of Cambridge

Dame Professor Sandra Dawson
Judge Business School

Professor Simon Deakin
Assistant Director
Centre for Business Research
University of Cambridge

Dr Reg Hinkley
Bursar, Christ’s College Cambridge
(ex – Chief Executive BP Pension Fund)

Dr Sean Holly
Director of Research
Faculty of Economics, University of Cambridge

Professor Alan Hughes
Director
Centre for Business Research
University of Cambridge
Mr Andrew Kilpatrick
Director for Project Design and Appraisal
European Bank for Reconstruction and Development

Mr Michael Kitson
Assistant Director
Centre for Business Research

Dr Ray Lambert
Department for Business, Innovation, Universities and Skills

Professor Christoph Loch
Director, Judge Business School

Ms Kate Nealon
Non-Executive Director
HBOS plc

Dr. Raj Rajagopal
Non-Exec Director, Bodycote Plc, Dyson Plc and W.S. Atkins Plc

Professor Gavin C Reid
Founder/Director Centre for Research into Industry, Enterprise, Finance and the Firm (CRIEFF)
School of Economics and Finance
University of St Andrews

Professor Robert Rowthorn
Faculty of Economics, University of Cambridge

Professor Paul Stoneman
Warwick Business School

Professor Sarah Worthington
Faculty of Law
University of Cambridge

Liz Hewitt (Secretary)
Administrative Secretary
Centre for Business Research
8. Committee of Management

(as of 31 July 2012)

Dr Brendan Burchell
Faculty of Social and Political Sciences
University of Cambridge

Professor Brian Cheffins
Faculty of Law
University of Cambridge

Dr Andy Cosh
Assistant Director
Centre for Business Research
University of Cambridge

Professor Simon Deakin
Assistant Director
Centre for Business Research
University of Cambridge

Professor Lindsay Greer (Chairman)
Professor of Materials Science
University of Cambridge

Professor Mike Gregory
Director
Institute for Manufacturing
University of Cambridge

Professor Andrew Harvey
Chairman
Faculty of Economics
University of Cambridge

Dr. Sean Holly
Director of Research
Faculty of Economics
University of Cambridge

Professor Alan Hughes
Director
Centre for Business Research
University of Cambridge

Professor Ron Martin
Department of Geography
University of Cambridge
9. Performance Indicators

The following Tables contain details of key performance indicators. They are mostly as agreed in the original contract with the ESRC. With the end of core funding, these are no longer binding on the CBR, but we continue to benchmark our performance by reference to them.

A. PUBLICATIONS

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*Totals shown exclude books, chapters, articles, and papers which were in draft, in press or forthcoming as of 31 July 2011*
## B. EXTERNAL DISSEMINATION

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### C. STAFF RESOURCES

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† Including a notional allocation representing a proportion of the time of the Director and Assistant Directors (0.4 FTE in each case)

* In 2010 the CBR reviewed its research associate list and redefined the category to include continuing substantive involvement in current projects and publications. This led to a reduction in numbers of individuals formerly listed for example as parts of collaborative networks, as well as normal reductions due to retirement etc.
### D. FINANCIAL RESOURCES

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<td>26,662</td>
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<td>781,799</td>
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<td>1,027,727</td>
<td>975,408</td>
<td>904,072</td>
<td>14,484,956</td>
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All sums are expressed in £s. *special reporting periods (see annual reports for 2003 and 2005-6).