

**Policy and Practice Impacts of
ESRC Funded Research
Case Study of the ESRC Centre for
Business Research**

Jordi Molas-Gallart

Puay Tang

**Report prepared for the
Communications and Information Directorate
Economic and Social Research Council**

March 2007

This report was prepared for the Economic and Social Science Research Council by Professor Jordi Molas-Gallart of INGENIO (CSIC-UPV), and Dr Puay Tang of SPRU (Science and Technology Policy Research) at the University of Sussex.

Table of Contents

TABLE OF CONTENTS	I
OVERVIEW	III
EXECUTIVE SUMMARY	V
OBJECTIVE AND APPROACH.....	V
ANALYSIS.....	VI
CONCLUSIONS.....	XI
POLICY AND PRACTICE IMPACTS OF ESRC FUNDED RESEARCH CASE STUDY OF THE ESRC CENTRE FOR BUSINESS RESEARCH	I
BACKGROUND	I
METHODOLOGY	3
CONCEPTUAL FRAMEWORK.....	3
DATA COLLECTION AND INFORMANT SELECTION	8
ANALYSIS	10
CHARACTERISTICS OF THE RESEARCH OUTPUT	10
CONTEXT	12
DIFFUSION AND TRANSFER PROCESSES.....	15
FORMS OF USE OF CBR OUTPUTS	18
IMPACT CASES	19
THE RESEARCHER AS USER: CBR’S WORK ON EMPLOYMENT AND LABOUR RELATIONS.....	19
THE “SME PANEL SURVEY”: THE IMPACT OF DATA GENERATION.....	21
CONCLUSIONS	23
METHODOLOGICAL DISCUSSION	25
IMPACT ASSESSMENT ISSUES	25
ADVANTAGES, SHORTFALLS AND TRANSFERABILITY OF THE APPROACH ADOPTED.....	27
REFERENCES	28
APPENDIX. EXAMPLE OF QUESTIONNAIRE FORMAT: THE RESEARCHER QUESTIONNAIRE	30

Overview

Our research 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, which confirmed Government's expectations of the impact of these laws.

However, 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).

Labour and employment relations. CBR research has had a significant influence on the definition and assessment of UK labour policy. The impact resulted from different and variously funded research projects involving several researchers of varying seniority, and disseminated and used through a variety of reinforcing channels. The main instances of impact include the introduction of the minimum wage and new rights for trade unions. Regarding minimum wage, CBR's studies helped assess the impact of the policy and *confirm* it had not had deleterious effects on competitiveness.

The 1999 Employment Act was introduced at a time when significant changes were occurring in employment relations. There had been a shift towards a 'partnership' model in some industries in the mid-1990s, before the Act came into force. There was also a move towards greater flexibility and 'individualisation' of pay and terms and conditions, affecting unionized and non-unionised workplaces alike. Against this background, CBR's research concluded that the Act did not bring about an increase in union militancy, as some had feared, and showed that the Act supported the government's competitiveness-based agenda. It is in this sense that the Centre's research on the Act confirmed a policy decision.

SME data. The "National Small and Medium Sized Business Survey" consisting of more than 2000 SMEs is clearly one of the highest profile activities conducted by the CBR. The longitudinal data sets generated by these panel surveys have provided an extremely valuable resource for researchers in academia, government and the private industry. For instance, Government departments, such as the DTI and the Treasury used the data for *confirming* and *informing* policy on SMEs attitudes on the impact on Government policy and concerns over access to financial support. In particular, the data informed Government that SMEs required more support in management training than in financial assistance, the latter of which had been until then the main aim of Government. Private sector companies, such as banks, also used the SME panel data to *crosscheck* their internally generated data on SMEs

and also to help *inform* their policies on credit support for smaller firms in various regions throughout the UK.

Equally importantly, the SME data also provided the main basis for contract research assignments for public and private sector clients, which the CBR carried out during 1994-2004. These included commissioned work from the DTI, Joseph Rowntree Foundation, the TUC, DfES, the British Bankers' Association, the EU, the Office of National Statistics, and East of England Development Agency. These studies were very important for engaging CBR in policy-relevant work and for further use by the non-academic community.

Executive Summary

Objective and approach

The objective of this study was to identify the policy and practice impacts of the ESRC-funded Centre for Business Research (CBR) and the ways in which such impacts had occurred. In addition, we aimed to develop further current evaluation research methods, taking as a point of departure the approaches already developed and implemented by the ESRC Research Evaluation Committee. The study was carried out between May and September 2006.

The ESRC provided core funding for the CBR between 1994 and 2004, and this was the period in which we focused our analysis. During this period the CBR received a £4.6 million as ESRC Centre funding. The Centre operated as a university department but also was funded from a variety of sources and drew on research associates from other University of Cambridge departments and elsewhere. The share of core funding within the overall CBR budget declined over the 10-year period under review from around 95% to under 40% by 2004.

We developed a conceptual framework, from which we built our questionnaire instruments and structured the reporting of results. The framework attempted to capture the many ways in which economic and social research affects society, the processes through which impact occurs, and the context that helps explain the nature of the application of research outputs. Our approach followed recent evaluation practice in trying to identify relevant contextual factors with a bearing on policy and practice impacts. We distinguished the “content” of the relationship we were analysing (all potential research outputs that are susceptible to application outside academic environments including, in addition to research “findings”, the skills, techniques and methods that young and senior researchers had learnt and acquired in the course of their research activities), the processes by which such content finds its way into non-academic applications, and the context within which these processes take place.

We based our study on documentary research and a programme of structured telephone interviews with researchers and potential users and beneficiaries. We attempted to interview all senior researchers in the CBR for the 1994-2004 period including the Directors, Programme Leaders, and some leading Research Associates who had made exceptional contributions to the work of the Centre. We interviewed eight researchers in this category and one could not be reached for comment. We identified and interviewed eight junior researchers who had received substantial support from the ESRC Centre funding and were also likely to have been involved in the transfer and application of CBR outputs outside the academic environment. Finally, to identify potential users and beneficiaries we relied on a nomination technique. All researchers interviewed were asked to identify potential users of their research at CBR. We identified and found the current

details for 25 potential interviewees of whom we were able to interview 22. In total we carried out 38 interviews.

Analysis

Contextual issues: The research agent

The CBR was set up as a university department, independent from any other school and department, and reporting directly to the University's General Board. The management believes this to be a crucial factor in its success, providing more flexibility and autonomy to develop its own policies. Several University of Cambridge Research Associates have used the CBR to carry out activities that required involvement with external clients or outreach activities. Senior academics at the University of Cambridge Faculty of Law, Judge Business School, the Faculty of Economics, the Faculty of Social and Political Sciences and the Department of Geography have channelled their research contract activities and the organisation of conferences and other events through the CBR, and in collaboration with other CBR members. Some of the most influential work carried out by CBR has involved this type of collaboration and has drawn on University of Cambridge faculty members. They typically found the Centre to provide an excellent tool supporting their engagement in contract research and policy-relevant work.

Another important element of the organisational context that has contributed to the engagement with non-academic communities is the "Cambridge brand name". Both junior and senior researchers repeatedly stated that the brand name was an important factor in facilitating access to new contacts outside academia.

Contextual issues: practitioner attitudes

We found a wide variety of modes of interaction between practitioners and CBR researchers. The majority of users interviewed displayed a passive approach to their interactions with the CBR: they had learnt about the Centre, read their publications and attended their events, but were not actively involved in seeking information or collaborating in research activities with the Centre. However, we also found a significant number of users (six) that were actively involved in research and other types of collaboration with CBR academics (usually through the commissioning of research). Further, a small number of core users played a key role making it possible for a broader range of *other* users to play a part in supporting the CBR, and influencing its research agenda. For instance, the Chairman of the CBR Advisory Board collaborated with CBR research teams on several occasions, suggested research areas and questions, encouraged other Advisory Board members to help the research teams identify research topics, helped the teams to obtain access to research subjects and additional resources, and was central to the process of utilisation of the CBR's research outcomes.

Diffusion and transfer processes

CBR members engaged with potential users and beneficiaries of its research capacities and outputs through a variety of channels, including:

- *Consultancy, contract research and advisory work.* The CBR was deeply involved, mainly through their senior researchers, in carrying out research assignments and formally providing advice to the private and public user groups. They were a crucial means in the application of CBR outputs to policy and practice. Research contracts with user groups, particularly in government departments, such as the DTI, particularly the Innovation Unit, Small Business Services and Insolvency Services Agency, and the TUC led to results with a policy impact. Often, we found that the examples of impact mentioned by researchers, and the user contacts they nominated for potential interviews, were linked to contract assignments. Often the contracts were part of a more complex relationship and were only one among other ways of bringing together the same users and researchers. For instance, practitioners who were aware of the SME Panel Survey were initially passive consumers of the data and reports but ended commissioning additional research, as in the case of the DTI. In other cases, research results and collaboration between practitioner and users were channelled through researcher participation in advisory boards and other policy organisations, such as Acas (Advisory, Conciliation and Arbitration Services), a UK organisation devoted to preventing and resolving employment disputes.
- *Social networks.* The CBR played a different role in the creation and strengthening of social networks depending on the seniority of researchers. All but one of the junior CBR researchers interviewed established extra-academic contacts through their participation in CBR projects. However, these contacts were infrequent, mostly established through interview programmes, and only in half the cases had any continuity after the project finished. Among the interviewed researchers who were at an initial stage of their careers when they joined the CBR, we found no examples of non-academic contacts established while at the Centre that had provided an avenue for future collaboration or knowledge exchange after the researchers moved to other academic jobs. The situation is very different for the case of researchers who were involved in the creation and management of the CBR but were not yet Professors at the moment of creation. For this small group of core scientists in the Centre, the CBR was extremely influential in helping to establish networks of non-academic contacts.
- *Targeted dissemination activities.* Many users stressed the value of seminars and workshops, not only as a dissemination avenue but, at least as importantly, as an opportunity to establish and strengthen networks. Although we could not identify any specific instance of impact that could be traced to a contact or learning derived from a seminar or a workshop, these were the most valued dissemination mechanisms by the practitioners we interviewed, far exceeding the value assigned to other traditional dissemination methods like newsletters and websites.

Forms of use of CBR outputs

CBR's research was applied mainly in policy environments and as inputs into the policy processes. At times the data and analysis provided by the CBR confirmed the adequacy of policies that had already been implemented (like the research showing that changes in trades union legislation and labour rights did not have negative effects, and changes in the private insolvency regulations had not negatively affected the innovativeness of smaller entrepreneurs), and in others provided inputs into policy definition (like the information on the access of SME's to finance, which helped define SME support policies). Yet, in the complex process that characterises the formation of public policies we should not expect to find a direct line between a research finding and the adoption of a specific policy. The impacts we found were contributory in nature, and were usually part of a broader process of interaction and dialogue between policy makers and CBR researchers.

Impact cases

The call for tenders asked for relevant examples of cases where policy and practice impacts had been identified. We selected two cases: CBR's work on labour relations and the SME Panel Data Survey.

The CBR has had a significant influence on the definition and assessment of UK labour policies. Over a long period of time, a group of CBR researchers had carried out several research projects related to the definition and implementation of UK labour policies. Research activity and policy interest in the research and its results can be explained by a very favourable policy context where research became a key element to develop, monitor and support a set of innovative and highly controversial policies. In 1997 the new Labour Government had started introducing legislation increasing Trades Union rights and establishing a national minimum wage, and needed empirical evidence that would guide policy development and implementation. Several CBR projects showed that the economic effect of the new legislative measures was negligible, thus allaying fears that more workers' rights would have a negative influence on competitiveness. The study on collective bargaining and industrial relations showed that what determined the impact of the Unions was how the employers viewed them and not the legislative framework. The results were used directly by civil servants at the DTI as an evaluation of the impact of the Employment Relations Act, and the results were used to *confirm* a policy decision. A different type of impact was the way in which the research on "partnership" led a CBR Associate to facilitate a number of partnership agreements as chair of the "Partnership Board".

The SME Panel Survey is one of the highest profile activities organised by the CBR and has been carried out since 1991. The SME survey and the analysis of the data it generated became a crucial activity for the CBR. The longitudinal data sets generated by the surveys provided an extremely valuable resource for researchers both in academia, government and the private industry. We found examples of use of the panel data in government departments and in the private sectors. It also provided the main data for contract research assignments from public and private clients, which were very important for engaging CBR in

policy-relevant work. Consequently, there was not a single impact of the use of these data but a variety of effects of different intensity. Often, the data and the main conclusions of the survey were helpful to organisations to confirm the adequacy of policies that they had launched. In other cases, studies carried out using panel data were important in the process of policy formation providing evidence that helped shape policies.

The department that made a more extensive use of the SME Panel Data was the DTI. Several officials in different DTI offices confirmed the usefulness of the panel data, and of CBR analysis to confirm, develop and justify policy. Particularly, it influenced thinking on the modes of SME assistance by providing, for instance, valuable information on how SMEs accessed finance and support for management training. The data had also been used in other departments and organisations. A Treasury official indicated that CBR data and analysis influenced the definition of UK policy to use the tax system to encourage start-ups. A bank used the CBR data on SME's access to finance to cross-check and confirm the validity of its own data and sources, and help shape its policy for credit support of SMEs throughout the UK. Further, the CBR work made a significant contribution to evidence-based policy research. Some respondents pointed out that the approaches used by CBR, with their mixed methods and reliance on extensive and reliable data, established the type of robust empirical analysis that should count as evidence in "evidence-driven" policy process.

These are by no means the only instances of impact encountered but illustrate two important facts. First, that very different types of use and mechanisms of knowledge exchange can co-exist within the same centre: the cases are very different in the forms of "research output" being transferred, the types of collaboration between users and academics, and the policy application of the outcomes. Second, that substantial impacts occur through complex processes often involving more than one project and being aligned with long-term collaboration processes and network activities that link a group of individuals over a long period of time. The simple model of a research project yielding specific empirical or theoretical results, which are then "disseminated" and successfully used to address practical problems, does not respond to the reality of knowledge use processes.

Finally, we found that among the policy audiences that the CBR work targeted, research makes a contribution as a further input into a complex and long-drawn policy process. "Use" can be defined in terms of a contribution to the policy process, in the shape, for instance of evidence to inform these discussions. This is a less direct type of use and application than we could expect in other contexts. For instance, we could expect some elements of management research to make direct easily identifiable impacts in corporate management practice. It is however in the nature of CBR's research that it finds its natural audience in policy circles, where the influence of research is of a more indirect nature as an input into complex policy formation processes.

Methodological considerations

Although the ESRC deploys very different funding instruments, with different management structures and posing different problems to evaluation efforts, we believe that the

conceptual framework we have devised for this study is applicable across different instruments. The structure has allowed us to differentiate the role of different dissemination mechanisms and has helped us understand how a specific approach to Centre management is associated with specific forms of knowledge interaction and impact processes (in our case, for instance, the importance of network activities was limited to the most senior CBR members, reflecting a structure where stability at the core of the Centre combined with rapid mobility among junior researchers and assistants).

Our approach also tried to expose the importance of contextual issues in the explanation of policy and practice impacts. The importance of contextual issues had been abundantly discussed in previous ESRC-organised evaluation workshops and studies, but had not yet been systematically explored in evaluation practice. Our attempt here was exploratory, and through the questions we devised we were able to gain much detail about the ways in which context mattered in the diffusion and impact processes. It became clear that the CBR status as a University of Cambridge Centre was very helpful, both for junior researchers and for more senior staff. Furthermore, some of the high impact research we encountered addressed issues that were of particular policy importance at that specific time: timing in terms of the alignment of research lines with policy needs revealed itself as an important impact factor. Finally, almost all the “users and beneficiaries” were drawn to seek help and information from the CBR because of specific policy and practical problems they were facing. Yet these conclusions are hardly unique and we were unable to draw more details from the “contextual questions” we devised. There is no doubt, and our research further confirms it, that contextual elements must be introduced in impact assessment and evaluation practice; but this is a complex matter requiring the adaptation of current research designs.

There are two aspects that need to be addressed in this regard: the definition of an analytical framework including contextual issues, and its application to specific research tools; how, for instance, can we capture contextual matters through a questionnaire survey? We believe that our conceptual approach, distinguishing the characteristics of the research agents and those of potential non-academic receivers and collaborators, has proved to be useful and can be applied in the future. Some contextual elements (contractual flexibility, pre-existing networks, modes of interaction,...) are relatively easy to capture through interviews. Where we found more difficulties was in our attempt to obtain an understanding of the market and other types of factors that may have encouraged potential users towards collaboration with academia. Through our conversations, and thanks mainly to the semi-open nature of our questions, we were able build an understanding of those situations in which the demands of the policy context had clearly supported collaboration and impact. Yet, the direct questions we devised to identify demand environment factors yielded, in themselves, little detail.

Conclusions

When assessing the policy impact of academic research we should not adopt a linear view of the relationship between academics and potential users and beneficiaries of academic research. For instance, many of the relevant instances of policy application of CBR research activities emerged from a context of collaboration, where researchers engaged directly with the policy world, through their own personal mobility out of academia (a rare event, but occasionally important), through the development of formal policy responsibilities along with their main academic work, or through strong links with policy makers. Further, the development of formal policy responsibilities was one of the main ways in which the CBR research agenda was influenced by policy needs. The fact that research was carried out “in the context of application” was one of the main factors explaining the impact of CBR’s research on labour relations. Here the relationship was such that the boundaries between research “producers” and “users” became blurred. In other words, collaboration was established in a bidirectional way, with involvement of users in research development and strong user-researcher networks covering different research projects. In this context, to use the term “impact” to refer to these forms of relationship may be misleading.

Finally, the social networks that CBR help establish and sustain emerged as one of the most important channels for policy and practice application. The amount and importance of networking activities was not randomly distributed among CBR researchers. Relevant networks were established, particularly at the top senior levels. Besides, some individuals, like the Chair of the Advisory Board, played a crucial role in the development of the Centre and of its policy and practice impact. Many of these core contacts existed long before the CBR was set up. The existence of a set of relevant activities that preceded the CBR, and to which the CBR gave continuity (in particular the SME Panel Survey and some of the work on corporate governance) provided a strong user network on which the CBR could build from its inception.

Policy and Practice Impacts of ESRC Funded Research Case Study of the ESRC Centre for Business Research

Background

The objective of this study is to identify the ways in which research results generated by the Centre for Business Research (CBR) have been used by policy makers and practitioners, and pinpoint specific research impacts. In addition, the study aims to develop further current evaluation research methods, taking as a point of departure the approaches already developed and implemented by the ESRC Research Evaluation Committee.

The CBR at the University of Cambridge was core-funded by the ESRC between 1994 and 2004. The Centre operates as a university department and supplements its core funding from a variety of other sources, as well as draws on research associates from other University of Cambridge departments and elsewhere for additional research capacity. The ESRC direct investment in the Centre (“core funding”) amounted to £4.6 million for the 10-year period. In addition, the CBR received about £0.5 million through ESRC research grants. The University of Cambridge contributed £1.3 million, which covered the Centre’s facilities and the Assistant Director’s salary. The University also received an additional £1.2 of HEFCE funds. The Centre also received substantial external funding from a range of foundations and public organisations to carry out research projects and consultancy assignments. In total, during the 10-year period under review here, the CBR raised £2.8 million in non-ESRC funding.

The share of core funding within the overall CBR budget declined over the 10-year period under review from around 95%. For instance, according to the Centre’s 2002-2004 *Report of Activities*, core funding constituted slightly under 40% of the total funding it received during this 10-year period. By 2003/4 the CBR had become the largest social science department in the University in terms of contracted research activity.

The CBR sought to achieve greater understanding of the links between business organisation, business performance and economic policy in an international context. It established itself as a leading UK centre for interdisciplinary research on business issues. The activities of the Centre are organised into three programmes bringing together groups of related projects¹:

- Innovation and Productivity. The emphasis of this programme changed during the period under study. During the first five years there was a focus on macroeconomic analysis on issues like world trade patterns and sectoral competitiveness. From 1999,

¹ After the ESRC core-funding ended, a new programme structure was established, reducing the number of programmes to two: Enterprise and Innovation, and Corporate Governance.

attention shifted to research on competition and performance, take-overs and investment, multinational companies and international mergers and acquisitions.

- Corporate Governance. Focused on the relationship between corporate governance structures (including incentive systems and executive pay) and the legal environment and business performance. The Centre has addressed issues like the regulation of takeovers and the impact of foreign direct investment on UK management.
- Enterprise and SMEs. The programme analyses the characteristics, location, innovative performance of SMEs, and the design and evaluation of policies targeting SMEs. It compiles a longitudinal panel set of data of UK SMEs based on a bi-annual survey of 2000 independent SMEs, which is managed by a survey and database unit within the Programme.

The CBR manages user engagement through different tools. An Advisory Board supports the activities of the Centre by suggesting research strategies and questions, facilitating contacts with industry for research purposes, and providing channels for the dissemination and application of research results. The members of the Advisory Board come from a broad range of academic and non-academic backgrounds.

In addition, the CBR benefits from the services of a dedicated dissemination staff member. Supported by the Centre's administrator and the Director's secretary, she is in charge of editing and distributing the Centre's newsletter, organising events, and managing relationships with the press, including the production and distribution of press releases. The dissemination activities the Centre have included:

- Organisation of seminars and workshops, often in collaboration with private sponsors
- Book launches
- Series of briefing papers
- A regular newsletter
- Articles in newspapers (such as the *Financial Times*, *Observer* and local newspapers)
- Advisory roles to committees, ministerial departments, private firms and foreign governments

After the ESRC core funding ended the CBR continued its activity, which drew on a diversity of funding sources, including ESRC "responsive mode" projects and research assignments for an array of clients, such as the Department of Trade and Industry. The continuation of the CBR builds upon the diversified funding structure it developed during the 1994-2004 period during which it drew its main source of income from the ESRC centre funding. Throughout this time it engaged in an assortment of activities beyond those directly linked with core funding, such as undertaking contract assignments from government departments, for example the DTI, and policy related organisations, like the

TUC and Acas. In addition, CBR researchers participated as advisors to various Government and policy committees, such as to the Council for Science and Technology, the Bank of England, Inland Revenue and the Financial and Services Authority. They were also specialist advisors to European governments in the Netherlands and France, as well as to the European Commission. This capacity to draw on diversified sources of support has enabled the CBR to continue its work and to become an established research centre, rather than a research group depending for its survival on a large grant.

This situation makes it difficult, and pertinently, to attempt to attribute Centre impacts and successes to a specific funding source. The natural unit of analysis should be the Centre rather than a specific grant; yet, research funding organisations are interested in learning about the difference that their support has made. In the section below, *Methodology*, we discuss how we are trying to combine a focus on Centre activities with a specific interest in analysing the impact of a specific and crucial, source of funding.

Methodology

The call for tender requested an assessment of the policy and practice impacts of the ESRC CBR. Such impacts can be very varied, often indirect and difficult to identify and trace. The object of an impact assessment methodology is to allow us to recognise such impacts. Yet, the danger is that in our effort to search for signs of impact we develop a complex approach which is hard, if not impossible, to use in practice. To tackle this risk we have to build our approach on a clear conceptual framework, from which we then build our questionnaire instruments.

Conceptual framework

Background

The conceptual framework we have used is rooted on our theoretical understanding of the many ways in which research affects economic performance and society (Martin, Salter, Pavitt et al. 1996). These are not limited to the direct utilisation of research results, or the application for “practical” purposes of tools developed through the scientific effort. The way in which social science research can have an impact on “practice and policy” is often more convoluted and difficult to grasp. Ideas and concepts developed within the framework of academic research can filter through time into the rationales and justifications for new policies, with neither the originators nor the users being aware of the genesis of a policy strategy; in other words, they can “creep” into decision-making processes in ways that are difficult to identify (Weiss 1980). Research outputs can be modified or “part used” before being applied (Tyden 1996). Further, impact is not limited to the application of the new knowledge generated through research activity. Researchers, for instance, can learn skills and methods that they can then apply to their work outside academia; this can be a potentially relevant source of impact even when such skills and knowledge are not strictly speaking new. The role of research programmes as a diffusion channel, from academia to policy and practice, of existing knowledge cannot be disregarded a priori.

In these circumstances, the main objective of an impact assessment is to capture the processes through which impact occurs and identify and assess instances of impact. A case study methodology enables such an approach. The ESRC has conducted a prolonged effort over many years to develop tools to assess the impact of its investments. One decade ago, a report to the ESRC presented a list of “models of research utilisation” on which to build an impact assessment model (Cave and Hanney 1996). This report, which came after a series of workshops and initiatives spanning several years presented a complex model of utilisation, which was difficult to operationalise as an evaluation tool. However, its focus on identifying processes and therefore the forms of interaction between researchers and non-academic users was to remain a central element in subsequent methodological developments. The approach was refined in further studies, including a set of pilots conducted in 1999 (Molas-Gallart 1999), further developed in a workbook (Molas-Gallart 2000) which was used internally by the ESRC but found to be too costly to form the basis of a routine system of impact assessment.

During the current decade, both the ESRC and other organisations within the UK and overseas have continued to develop new approaches for the evaluation and impact assessment of research activities. Their main contribution is that they are increasingly taking into account the importance of the receptiveness of potential users when explaining the uptake of research results and the impact of research initiatives. Uptake and impact are not only a function of the research itself but also of the context within which research outputs are delivered (Davies, Nutley and Walter 2005).

These *contextual approaches* are broadening the scope of evaluation beyond attempts at identifying the direct effects of a research initiative, towards studies considering the whole “system” within which research initiatives are taking place. This is theoretically sound, but it adds yet more complexity to any assessment method. A consideration of the context in which a research investment takes place can be very costly and time consuming. A contextual approach must focus on potentially significant factors, like the receptiveness of potential users to the research results, but cannot extend, for practical reasons, to the development of a comprehensive understanding of the broader economic and societal context into which long-term impacts may occur. Specific contextual factors are addressed in our conceptual framework and are included in the research questionnaires.

Conceptual framework

Our approach “tracks forward” from the research outputs to the way in which these have been incorporated into practice in the public and private sectors. Starting from a broad view of potential research outputs (see below) we developed and adapted the conceptual framework we used in our previous ESRC impact assessment study (Molas-Gallart 1999; Molas-Gallart, Tang and Morrow 2000). We expanded and modified this framework to incorporate an analysis of the contextual environment in which the CBR develops its activities (see Table 1 below), and we then used this framework to structure our interview questionnaires (see Annex). This framework distinguishes the “content” of the relationship

we are analysing (the outputs of the research carried out in the Centre, and which are susceptible to application outside academic environments), the processes by which such content finds its way into non-academic applications, and the context within which these processes take place.²

Table I Conceptual Framework

<p>I. Content</p> <p>a. Characteristics of the research output</p> <p>i. “Public goods” (information)</p> <ul style="list-style-type: none"> • Conceptual • Identification of causal relationships (theories) • New methodologies and tools (instruments) <p>ii. New skills and tacit knowledge</p> <p>2. Process</p> <p>a. Diffusion and transfer processes (from targeted to broadcast)</p> <p>i. Consultancy and advisory work</p> <p>ii. Social networks</p> <ul style="list-style-type: none"> • Formally organised by Centre • Other formal networks • Informal <p>iii. Researcher mobility</p> <p>iv. Publications</p> <p>v. Media appearances</p> <p>b. Forms of use</p> <p>i. Conceptual</p> <ul style="list-style-type: none"> • Inputs to policy development • Policy confirmation • Policy justification <p>ii. Instrumental as problem-solving tools</p> <ul style="list-style-type: none"> • Direct application • Modified/adapted application <p>3. Context</p> <p>a. Characteristics of the research agent</p> <p>i. Resources and incentives for outreach activities</p> <p>ii. Flexibility</p> <ul style="list-style-type: none"> • Labour mobility • Contractual flexibility <p>iii. Pre-existing networks</p> <p>b. Characteristics of the recipient</p>

² This distinction between “content”, “process”, and “context” follows Pettigrew’s approach to the design of longitudinal research methodologies to carry out case studies on a comparable basis. (Pettigrew 1990).

- i. Demand environment
 - Market factors (related to the need for research results)
 - Other factors
- ii. Mode of interaction
 - Reluctant receiver
 - Passive receiver
 - Active receiver (evidence/based practitioner)
 - Collaborator (embedded in the process)

This structure brings together different approaches to evaluation and case research methodologies:

1. *Types of output.* Our approach focuses on the diversity of outputs that can emerge from research activities, without being limited to the practical application of narrowly interpreted research *findings*. Research evaluations have often focused on the written expressions of such findings like academic journal articles, while impact assessments may focus on indicators of the commercial exploitation of such findings through mechanisms like patenting, spin offs and other commercialisation activities. However, research activities yield more outputs than the scientific results of the research. Our understanding of project outputs is broader – we consider application of the skills and knowledge that researchers have developed during their involvement with the Centre to their future professional careers and the creation of networks involving researchers and potential beneficiaries (Molas-Gallart 1999).
2. *Forms of use.* Following Nutley (2005), we differentiate between “instrumental use” of research results (mainly as problem solving techniques) and “conceptual use” (extending from policy confirmation and justification to inputs into policy development). It must be noted, however, that although we use the same terminology as Nutley’s, our interpretation of the terms is different. Nutley considers a *conceptual* impact to occur when there is a change in the knowledge, understanding or attitudes of decision-makers attributable to the research initiative under study. In her framework the conceptual impact progresses from simple awareness, through gaining knowledge and understanding to changes in attitudes and perceptions, thus suggesting a continuum, with impacts becoming more substantial as they evolve from a generation of awareness at one end of the “conceptual use”, to practice and policy changes at the other end of the “instrumental use”. Instead, in our approach we reserve the term “instrumental use” for the application of tools and techniques developed through the research initiative to the solution of problems faced by non-academic users, while the term “conceptual use” will be applied to any of the processes through which new understanding and concepts derived from the research have filtered to non-academic communities and changed or informed their practices. Thus, on the one hand, our criteria are more demanding: it is not enough

for a potential user to become aware of the results of the research, but it needs to have used these results in some way. Yet, on the other hand, we consider the possibility that the results of a study could be applied to policy confirmation or justification (a form of use that does not involve a change in policy). As analysts of public policy have stressed, even the use of policy-relevant analysis in a justificatory manner plays an important role in the policy-making process (Majone 1989) and therefore it should not be disregarded.

3. *Context.* The understanding of the contextual situation in which a research initiative takes place is crucial to the assessment of its impact. The forms and extent of research use cannot be analysed in isolation of the context in which they take place, as the circumstances of potential users are a crucial determinant of the ways in which impact occurs and of its extent and character. We are basing our approach to the identification of contextual factors on the framework developed by Castro Martínez and her colleagues to analyse knowledge transfer capacities in Spanish social sciences and humanities research centres . They distinguish between characteristics of the (a) “transfer agent” and (b) of the potential or actual recipients of any knowledge transfer. Although their objective is to develop a static assessment of capacities for non-academic use focusing on the institutional environment, their approach provides a useful avenue to develop a conceptual framework to operationalise contextual factors in a questionnaire structure. In our conceptual framework we include the (1) characteristics of the research centre and its researchers that may affect their non-academic engagement, including the direct encouragement and support provided by the Centre to establish links with potential non-academic beneficiaries, (2) the mobility of academics in and out of academic work, and (3) the existence of contacts between Centre researchers and potential beneficiaries pre-dating the involvement of each individual researcher in CBR work. These are contextual characteristics of the research agents that may affect the types and channels of policy and practice impact of the CBR. Further, we include an assessment of the receptiveness of the potential beneficiaries in terms of their initial attitude towards the potential value of the research activities under assessment. Our framework distinguishes between (a) “reluctant” receivers (when potential users and beneficiaries are resisting involvement with the Centre activities but they are somehow convinced to participate – for instance, agreeing to become the subject of an interview), (b) “passive” (when they accept involvement with the Centre, readily agreeing to participate in interviews or case studies, attending lectures and seminars, etc.), (c) “active” (when their involvement extends to the suggestion of research lines or questions or volunteering to help to the research teams), and (d) “collaborators” (when they work in partnership with academics in research projects by forming part, formally or informally, of the research team).

Data collection and informant selection

The starting point for our study was the documentary sources made available to our team. These included final and annual reports for the Centre, Centre evaluations, websites and publications. This information allowed us to gain insights into the centre's activities, draw a list of researchers that had participated in the CBR during the 10 years of ESRC Centre support, details of their sources of funding, projects in which they were involved, and the duration of their association with the CBR. We used the information to make a selection of potential interviewees, both among CBR researchers and potential users and beneficiaries.

The main focus for our study is the impact of the activities carried during the 1994-2004 period, when the CBR received core funding from the ESRC. During this period there was a high turnover of junior researchers, with more than 60 researchers having been employed by the CBR during the period under study, most spending two years or less at CBR. High mobility levels prevailed among junior researchers, while Centre Directors and Programme Leaders were much more stable, with most of them having been associated with the CBR for the whole decade under study and beyond.

Although it could be expected that the most relevant policy and practice impacts would be channelled through senior researchers, we argue that to eliminate more junior researchers from the study would be inconsistent with our analytical framework. Given that our research design pays attention to a broad variety of processes and considers, among others, the ways through which researcher mobility can convey impacts outside the academic world, it is necessary for us to address a selection of younger researchers in our interview programme, even when their involvement with the CBR has been relatively short-lived.

We attempted to interview all senior researchers in the CBR for the 1994-2004 period including the Directors, Programme Leaders, and some leading Research Associates who had made exceptional contributions to the work of the Centre. We interviewed 9 researchers in this category and two could not be reached for comment. Naturally, the selection of the junior researchers was more problematic. Because the distribution of impacts across individual researchers and projects is often skewed and impacts are multifaceted, indirect and difficult to predict, a random sample was not adequate. Instead we selected a list of potential informants that displayed the following characteristics and who were formally associated with the CBR:

- A significant level of involvement, allowing the informant to have developed skills and acquired new knowledge during the association with the CBR. We were looking for researchers with a minimum one-year FTE research assignment with the CBR
- Preferably, but not exclusively, researchers who owed their work at the CBR to projects funded through core ESRC support³

³ Although our focus was on the impact of ESRC funding, the Centre leveraged this core support to obtain many other sources of financial support. For the issues that this raises for the assessment of the impact of specific sources of income see our methodological discussion at the end of this report.

- We attempted to interview all CBR researchers who had, after their involvement with the CBR, pursued a career outside academia, or who we knew had been substantially involved in either consultancy, research contracts for non-academic organisations or public policy activities

In sum, we tried to identify researchers who, because of their profile, were likely to find our questionnaire relevant. We were not attempting to identify an “average researcher”, but instead, to find instances of impact and mechanisms through which these impacts had occurred. With the help of the CBR’s Acting Director, Professor Simon Deakin, we identified and traced the current whereabouts of nine potential interviewees in this category. As noted above, in total, we interviewed 9 researchers in this category, with two who subsequently could not be reached for comment, although they had agreed to be interviewed when they were first contacted.

To identify potential users and beneficiaries we relied on a nomination technique. All researchers interviewed were asked to identify potential users and beneficiaries of their research at CBR. In many cases the nominees we obtained were the same from several researchers. We were however successful in identifying and locating 25 potential interviewees, all of them nominated by the researchers, of whom we were able to interview 22. Two from the balance of three did not respond to our repeated (three) attempts to contact them; the remaining respondent declared that he was not in a position to respond because “it was so long ago” when he had some contact with the CBR. On the whole, we required an average of three attempts to receive a response from the users.

We did not “cascade” the nomination technique any further. For instance, we did not ask user informants to provide us with further contacts within their own organisations. Often, this is a recommended strategy to follow: this is because sometimes the individual that provides the point of contact with academic organisations plays a specialised “academic liaison” role and disseminates the activities or results of academic research within the organisation. When this happens, the contact point may not be aware of the eventual impact of its “brokering” activities on his or her organisation. Yet, most of the interviewees in our research could be considered final users or beneficiaries. In the cases where they had played an interfacing role, they were able to provide cogent accounts of the impact that these activities had had. We therefore decided not to extend the interview further down within organisations that we had interviewed. We did however talk to members of the same organisation when their names had been given by different researchers and were connected to different CBR research projects.

In total we carried out 38 interviews. Six were face to face and were carried out by both members of the research team. In three cases the questionnaire was sent to the interviewee upon their request and we received written answers by e-mail. The remaining 29 interviews were conducted over the phone. An average interview took between 45 minutes and 1 hour.

The interview instruments

We developed three different questionnaires (for Centre and Programme Directors, Researchers, and users/beneficiaries). The two questionnaires for CBR Directors and CBR researchers were very similar, but the instrument designed for CBR Directors had to include some additional questions on the definition of the Centre activities and their management roles. The questionnaire for researchers paid more attention to “post-research” activities to illuminate any possible dissemination channels that had taken place once the researcher had left the CBR. Otherwise the two questionnaires are similar. All the questionnaires were structured following our conceptual framework (see above) and aimed to:

- Identify the types of existing or potential application of research outputs by user communities; and
- Identify networks of CBR researchers and potential users, and the extent to which these networks pre-dated the creation of the CBR, but have continued after ESRC core funding or the association of the researcher with the CBR ended;
- Track whether and how the researchers have used the outputs of the projects in their subsequent extra-academic activities
- Determine how research outputs (including but not limited to research results) were conveyed outside academia, and what models of research use were predominant
- Assess the extent and contribution of formal dissemination and user engagement activities organised by the CBR
- Identify the contextual elements that may help explain the extra-academic application (or lack thereof) of CBR outputs.

The questionnaire formats were piloted during the first round of interviews with the Director (Prof. Alan Hughes then on sabbatical), Acting Director Prof. Simon Deakin, a user, Matthew Bullock, two Research Associates and the Press and Public Relations Officer, after which some small changes were introduced to clarify some questions and reduce the time necessary to carry out the interview (all the pilot interviews had taken well in excess of one hour to complete). The questionnaires we used can be found in the Appendix.

Analysis

Characteristics of the research output

Public goods (information)

The CBR produced a broad range of “codified” outputs, including academic articles, newsletters, working papers, book chapters, books and datasets. There was also a concerted effort to generate written outputs in a form accessible to non-academic audiences: the CBR engaged professional help in web design and newsletter production. In

total the amount of data and publications produced during the 10 years under study was very abundant.

Some of the results that our study obtained were to be expected. All the junior researchers interviewed noted that the most valuable of the outputs they generated during their stay at CBR were the journal articles they wrote. The senior researcher leading the Centre or its research programmes had a different outlook and they mentioned specific books, reports and other outputs as most valuable to them; not a single senior researcher considered journal articles as the most valuable output. This difference is understandable given the different needs of researchers at different stages of their careers. One could have assumed that this difference alone would place junior researchers at a disadvantage when trying to engage non-academic audiences through their written work. It is typically regarded that non-academics do not read academic articles or that, when they do, find them impenetrable and less helpful.

Our study, however, revealed a completely different result: almost all the users interviewed read journal articles and some considered them to be “most valuable”. Our interviewees do not, by any means, constitute a representative sample, but they are the individuals through which the most relevant CBR “impact” on policy and practice was channelled. They were in most cases, experts conversant with academic research and capable of adapting and applying it to their practitioner context. In this case we found little evidence of the often-mentioned need for a “translation” of the academic results into “useful” information for practitioners.

There was no clear advantage of outlets targeted to the broadcast of CBR work to broader audiences like the website or the newsletters. For instance, the webpage was apparently not preferred over the journal articles as a means of non-academic dissemination (as many users did not use the website, and not a single one found the website or the newsletters as most useful, while a couple considered publication of journal articles as being the most useful channel of dissemination).

This is a counterintuitive result and may require further reflection. Clearly, the key policy audiences that the CBR targeted were expert users who learnt about CBR activities either through personal contacts or through active research (rather than by being the passive receiver of broadcast information). They were capable of using and interpreting data and academic research without any external help. Obviously they do not constitute the whole non-academic audience for CBR research, but they were no doubt the more strategic individuals from a “non-academic impact” point of view. This conclusion is unlikely to be applicable to other contexts: the practitioner audiences for CBR research were expert practitioners with policy experience and undertaking analytical tasks was either their main responsibility or a major component of their work. In other policy contexts the importance of broadcast mechanisms and “translation” services is likely to be different.

The CBR is also peculiar in another respect. It can be argued that its most important written output is not of an analytical nature, but a dataset. The case study below discusses in some detail the way in which the data derived from the CBR series of SMEs panel surveys

provided one of the main avenues for policy and practice impact. The data set was often mentioned as the most valuable CBR output.

New skills and tacit knowledge

The development of tacit knowledge and skills emerged as a comparatively minor Centre output from the perspective of their influence on policy and practice. Although a majority of junior researchers answered that they had applied to their subsequent careers skills and methodologies learnt during their work at CBR, they were often unable to provide clear examples of the ways in which this was done. In two cases reference was made to interviewing skills. There was only one case in which a respondent identified an approach learnt during work at CBR (in this case on theories related to corporate stakeholders) to work outside academia. The low mobility outside academia displayed by the CBR researchers we interviewed could explain this lack of examples.

Context

Characteristics of the research agent

Organisational context

The CBR was set up as a university department, independent from any other school and department, and reporting directly to the University's General Board. The management believes this to be a crucial factor in its success, providing more flexibility and autonomy to develop its own policies. In fact, several University of Cambridge Research Associates have used the CBR to carry out activities that required involvement with external clients or outreach activities. Senior academics at the University of Cambridge Faculty of Law, Judge Business School, Faculty of Economics, Faculty of Social Sciences and the Department of Geography have channelled their research contract activities and the organisation of conferences and other events through the CBR in collaboration with other CBR members. Some of the most influential work carried out by CBR has involved this type of collaboration and has drawn on University of Cambridge faculty members who direct a substantial part of their contract research activities through the CBR. They typically found the Centre to provide an excellent tool supporting their engagement in consultancy, research contract and policy work.

Furthermore, the CBR has the flexibility and capacity to manage large size contracts and support their own and associate researchers through their dissemination activities. The Centre has therefore facilitated non-academic engagement to other Cambridge academics. It must be noted that the number of senior academics with Research Associate status who have carried out high impact activities through the CBR is small (about 5 in total, and therefore a relatively small part of the total list of CBR Associates in and outside of Cambridge). Yet, despite the relatively small number of Research Associates involved, their work has been key in enhancing the CBR policy and practice impact.

Another important element of the organisational context that has contributed to the engagement with non-academic communities is the “Cambridge brand name”. Both junior and senior researchers repeatedly stated that the brand name was an important factor in facilitating access to new contacts outside academia. The factor was specially important for junior researchers requiring access to research subjects (either as interviewees or case study subjects), who often considered it the most important “support mechanism” when engaging with non-academic groups. Yet, among the interviewed researchers who were at an initial stage of their careers when they joined the CBR, we found no examples of non-academic contacts established while at the Centre that had provided an avenue for future collaboration or knowledge exchange after the researchers moved to other academic jobs.

Resources and incentives for outreach activities

The initial ESRC CBR funding earmarked a relatively low amount for dissemination activities. With about 5% of the total core budget for this type of work there was not an opportunity to conduct wide-ranging, meaningful dissemination work. A dissemination officer joined the Centre in 1998. A newsletter was initially produced and the scope and activities of the office grew over the years. The perceived need to improve the general awareness of CBR work led to several significant initiatives set up during the Centre’s second phase. A dissemination strategy was built on the back of additional funding commitments.

In 2003 a three-year block grant from the Abbey National offered additional funding to revamp the Centre’s website. This was a significant step: a professionally redesigned website included the publication of a Working Papers series which continues today. Increasingly the CBR has sought additional funding for workshops and other dissemination activities from external sources. The launch of reports has become a favoured dissemination channel and the Centre has also used the ESRC-funded “Social Science Week” to publicise its activities. The CBR has consequently developed a broad range of dissemination activities having as its core components the newsletter (distributed through a mailing list), website, press releases and an active agenda of public events including report launches and seminars.

Labour mobility

One of the achievements of the CBR is the building of a critical mass of researchers involved in the interdisciplinary study of business issues. In a typical year it would directly employ over 20 contract research staff and work with some 60 research associates from the University of Cambridge and elsewhere. In the 2002-2004 period CBR research staff and principal investigators supervised some 50 PhDs and 30 MPhil and MBA students. As important as the number of researches involved in the Centre is the way in which the CBR organised its human resources. The CBR supported young researchers at the beginning of their careers and offered support to find them work placements in academia and elsewhere. Typically, a young researcher would be working in the CBR for about two years and then would move on to somewhere else. Except in two cases of the researchers we successfully interviewed who had joined the non-academic sector (a third researcher who had also left for the private sector but did not respond to emails), the balance of those we interviewed

continued their academic career either in Cambridge or in other universities, such as Kingston University, Brunel, Birkbeck College, University of Birmingham Business School and Rensselaer Polytechnic in the U.S. For the three who had left academia, one joined a management consultancy organization, one went to a policy research institute and the other to the TUC. On the whole, mainly senior staff members, including Directors and Programme Directors, and a handful of administrative and technical staff personnel, remained in the CBR for the whole of the 10 years of ESRC Centre support. This approach to the management of human resources resulted in a very large number of researchers directly employed by the Centre – more than 60 (including senior staff) during the 10-year period.

As specified above we conducted interviews with a subset of 8 selected individuals who were junior researchers at the time of their involvement with the CBR. Two of them had progressed to jobs outside academia, but one contributed significantly to a whole set of activities that engaged the CBR in high-impact work (see the section below *The researcher as user: CBR's work on employment and labour relations*). Junior Fellows have therefore played a role in the establishment of stable academic-policy user networks, although this does not appear to have been a common occurrence.

Pre-existing networks and contacts

The CBR's leading researchers brought to the Centre an existing and dense network of previous contacts. Professor Alan Hughes had, for instance, good contacts with a wide range of political and industrial figures, had worked closely with some of them and had strong collaborative links with private sector managers. Particularly important in this regard was the collaboration with Matthew Bullock, who was to play a key role in the development of the Centre as Chairman of the CBR Advisory Board (see below).

Another user group with an important bearing in the genesis of the CBR is the advisory board of the Small Business Research Centre (SBRC), which preceded the CBR. The Board provided advice about the proposal that was to lead to the CBR. The CBR continued the SBRC research line on SMEs and the network of contacts provided by the Board was expanded.

Characteristics of the recipient

Demand environment

Unsurprisingly, all users responding to our questionnaire identified contextual factors (market conditions, policy context, etc.) behind their interest in CBR research. In a policy and industrial audience; pure intellectual curiosity is unlikely to be a strong driver for seeking linkages with academics. However, it is important to note the extent to which contextual policy conditions explain the impact of some of the CBR activities. For instance, the impact of CBR's work on industrial relations (presented in more detail in the impact case below) rests upon the importance that these issues gained in the context of the policy changes introduced by the then newly elected Labour administration. Without the changes

in legislation and new policy outlook introduced by the new government there would arguably not have been the same level of demand for CBR's activities in this field.

Modes of interaction

Even within our group of interviewees selected through a nomination process, we found a wide variety of modes of interaction with CBR researchers. More importantly, different types of interaction co-existed within the same organisation and in the same field of activity (see impact cases below). Nine out of the 16 interviewed users for whom we obtained data on this issue displayed a passive approach to their interactions with the CBR: they had somehow learnt about the Centre, read their publications and attended their events, but were not actively involved in seeking information or collaborating in research activities. In other words, even within a subgroup of nominated users (i.e. a sample selected for their high level of involvement and awareness of CBR activities), passive modes of interaction dominated. We identified a number of users (6) that were involved in research and other types of collaboration with CBR academics (usually through the contracting of research and consultancy work). It is important to note, however, that a small core of users have played a key active role in supporting the CBR, linking it to non-academic audiences, and influencing its research agenda. In fact, most of the direct impact of non-academics on the development of the Centre can be attributed to a relatively small core of particularly active individuals. They include, among others, Matthew Bullock, Chair of the CBR Advisory Board, Dame Mary Arden, ex-Chair of the Law Commission, Geoff Shingles, the first Chairman of the CBR's Advisory Board Chairman, and Gareth Jones.

All of them have played an active role in the development of the Centre. Gareth Jones was instrumental in obtaining funding for the CBR Working Paper series. Dame Mary Arden has been a key supporter of the Centre's law and economics work, and commissioned and influential study of Director's Duties for the Law Reform Commission. Matthew Bullock, collaborated with CBR research teams on several occasions, suggesting research areas and issues, and helping the teams to obtain access to research subjects and additional resources. This work went well beyond the provision of advice through Board meetings and extended to a continuous process of research collaboration. His individual role within the process of utilisation of the CBR's research outcomes became very significant: a high degree of relevance of the Centre's research activities was coupled with active networks within the City and other potential user communities. Equally importantly, the Chairman's active role made it possible for a very broad range of *other* users to play a part in supporting the CBR.

Diffusion and transfer processes

CBR members engaged with potential users and beneficiaries of its research capacities and outputs through a variety of channels. A set of transfer channels is through the contracted work that the Centre carries out for government agencies and departments, corporations and other organisations. A second set of channels occurs through the individual contacts and work carried out by Centre staff. These are many and varied. The CBR's *Report on*

Activities 2002-2004, lists 75 “user contacts” for this three-year period, ranging from presentations to institutions like the Bank of England, contributions to seminars organised by industry and government departments, advisory roles to and positions in a variety of public and private organisations, private consultancies to firms and government departments (mainly the Department of Trade and Industry), provision of training to firms, partnerships in training companies, external examining, and others. From the hundreds of contacts and outreach activities the interview programme allowed us to identify the most relevant ones according to researchers and the main users and beneficiaries. This section discusses the main diffusion channels identified through our interview programme.

Consultancy, contract research and advisory work

The CBR was deeply involved in carrying out research assignments and formally providing advice to private and public user groups. The ways in which these services were provided varied from area to area and according to the individuals, but in all cases they provided a crucial impact mechanism. Research contracts with user groups, particularly in government departments led to studies whose results played a role within the policy process. Often, we found that the examples of impact mentioned by researchers and the user contacts they nominated for potential interviews were linked to contract assignments. Often the contracts were part of a more complex relationship and were only one among other ways of bringing together the same users and researchers. For instance, practitioners who were aware of the SME Panel Survey were initially passive consumers of the data and reports produced around this initiative (see below) but ended in them commissioning additional research. Occasionally however the contract was the only way through which the user had established a relationship with the CBR; this is for instance the case of individual contacts established through an influential study on Director’s duties contracted by the Law Commission, already noted above.

In other cases, research results and collaboration between practitioner and users were channelled through researcher participation in advisory boards and other policy organisations. An example is the active policy engagement of a CBR senior researcher. This is elaborated below in the case study on labour relations.

Social networks

Depending on the seniority of Centre researchers, the CBR appears to have played a different role in the creation and strengthening of social networks. All but one of the junior CBR researchers interviewed established extra-academic contacts through their participation in CBR projects, in three cases about half of the contacts were new, and for the rest of the researchers, contacts were entirely new. However, interaction with these new contacts was infrequent as they were mainly undertaken during the course of case study interviews. Only in half of the cases was there any continuity of interaction after the project ended. Among the researchers we interviewed who were at an initial stage of their careers when they joined the CBR and then moved to other academic jobs, we were unable to find examples of non-academic contacts established through the Centre that had

provided an avenue for future collaboration or knowledge exchange after the researchers moved to other academic jobs. Among Centre directors and group leaders, the situation is different.

The Centre Director for the whole period under study, Professor Alan Hughes, had an extensive and dense network of high-level political and industrial contacts before and during the CBR. There is little doubt that this network was helpful during the setting up of the Centre, and provided an important avenue for information exchange with non-academics. Further, his CBR work helped him create new networks, both in the UK and abroad, and to increase connections across his existing networks.

The importance of the CBR in establishing and strengthening networks with potential users and beneficiaries was even more important for the case of researchers who were involved in the creation and management of the CBR but were not yet Professors at the moment of creation. For this small group of core academics in the Centre, the CBR was extremely influential in the development of their professional career and in helping establish networks of non-academic contacts. Professor Simon Deakin, for instance, extended his existing networks of trades union and personnel management contacts. Through his work in the Centre he developed a dense and diverse network of contacts with, among others, the Law Commission, the European Commission and the DTI. These connections provided a channel for information exchange and research collaboration. Professor Andy Cosh also intensified and expanded his pre-existing network of contacts as a direct consequence of CBR activities. In particular the possibility to develop a series of small research projects for policy clients allowed him to strengthen the links with policy makers.

Labour mobility

As discussed above the CBR is characterised by substantial mobility among its junior researchers. Did this mobility provide a means for the diffusion and exploitation of Centre outputs in non-academic environments? Only on a couple of occasions were we able to interview researchers who had moved from the CBR to positions outside academia. Of these, only one case (see below section on the “impact case” presenting the CBR’s work on industrial relations) did the mobility of the researcher create an opportunity for significant collaboration between the CBR and non-academic clients and beneficiaries. In another case the researcher did apply to his new job skills and methods learnt during his activity at the CBR, but he was unable to identify substantial impacts outside the learning effects. We can conclude that labour mobility did not provide a significant avenue for the impact of policy and practice of CBR’s capabilities.

The role of targeted dissemination activities

Seminars and workshops

Many users stressed the value of seminars and workshops, not only as a dissemination avenue but, at least as importantly, as an opportunity to establish and strengthen networks, including stronger relations with the CBR staff. The workshops and seminars provided a

forum where user would meet personally with CBR staff, and a way to meet other researchers and practitioners with similar interests. Although we could not identify any specific instance of impact which could be traced directly to a contact or learning derived from a seminar or a workshop, these were noted as the most valued dissemination mechanism by the practitioners we interviewed, far exceeding the value assigned to other traditional dissemination methods like newsletters and websites.

Briefing papers and other publications

Briefing papers have been used to disseminate the results of many of the CBR research activities. Specially relevant for their impact have the paper reporting the findings of the panel study of UK SMEs, which in turn received substantial media coverage in national broadsheets, magazines, and radio programmes.

Media appearances

The CBR was often featured in the press. Events like the launches of the SME surveys were reported in the press. Further the dissemination officer would systematically issue press releases, and occasionally CBR researchers wrote features for the *Financial Times*. Altogether there is little doubt that the CBR activities received more media exposure than is traditionally given to ESRC Centres. Presence in the press increases CBR's visibility and can provide an additional avenue for CBR's work to contribute to general policy discussion. Yet, the relation with the press is often a complex one. For instance, a CBR's study of the UK opt-out of the Working Time Directive received considerable press attention, but often the media reported selective and incorrect quotes offered by other interested parties. The researchers involved in this project did not find this kind of media attention helpful. Further, despite the media exposure the CBR received, the specific policy and practice impacts we identified were not channelled through media presence or discussion.

Forms of use of CBR outputs

CBR's research was applied mainly in policy environments and as inputs into the policy processes. At times the data and analysis provided by the CBR confirmed the adequacy of policies that had already been implemented, for instance, the research showing that changes in trades union legislation and labour rights did not have negative effects (more below). In other cases, the research provided inputs into policy definition, such as the information on the access of SMEs to financial support, which helped define SME support policies. Here too CBR research had shown that the changes to the private insolvency regulations (shortening the discharge period) the Government had implemented had a positive effect on the innovativeness of small entrepreneurs, thereby confirming Government's expectations. Yet, in the complex process that characterises the formation of public policies we should not expect to find a direct line and link between a research finding and the adoption of a specific policy. The impacts we found are contributory in nature, and are usually part of a broader process of interaction and dialogue between policy makers and CBR researchers.

Impact cases

The call for tenders asked for relevant examples of cases where policy and practice impacts had been identified. Here we use our framework to discuss two main cases of impact selected both for their significance and for the way in which they illustrate the way different impact mechanisms interact. They are by no means the only instances of impact encountered in our research but they illustrate two important facts. First, that the very different types of use and mechanisms of knowledge exchange that can co-exist within the same centre: the cases are very different in terms of the forms of “research output” being transferred, the types of collaboration between users and academics, and the policy application of the outcomes. Second, substantial impacts occur through complex processes, which often involve more than one project and are aligned with long-term collaboration processes and network activities that link a group of individuals over a long period of time. The simple model of a research project yielding specific empirical or theoretical results, which are then “disseminated” and successfully used to address practical problems, does not respond to the reality of knowledge use processes.

The researcher as user: CBR’s work on employment and labour relations

CBR research has had a significant influence on the definition and assessment of UK labour policy. The results were generated by different research projects, disseminated and used through a variety of reinforcing channels, and involving several researchers at different levels of seniority and with different connections to the Centre. The diversity of actors and mechanisms conceals the stability of a network of researchers and users on which the research activities and their impact channels were built.

For instance, Professor William Brown’s work, experience and networks constitute an important factor in CBR’s policy impact in the field of labour relations. Professor William Brown, a Research Associate at CBR and Professor of Industrial Relations at the Faculty of Economics joined Cambridge in 1985, had long been a recognised expert in labour issues, and channelled his own research projects through the CBR. These projects were related to his active policy research. Between 1997 and 2003 Brown was a member of the Advisory, Conciliation and Arbitration Service (Acas) Council and became a Commissioner in the Low Pay Commission (LPC), the institution created in 1997 to introduce Britain’s first National Minimum Wage. As a member of Acas and of the LPC, Brown was both an academic generating research and a heavy user of the results of his own research and of his colleagues. He was both generating knowledge and providing avenues for its dissemination to and application in policy contexts. The LPC, for instance, made a keen effort to monitor the impact of the minimum wage so as to establish a firm evidence base on which to develop further policy proposals. To build the evidence base, the LPC actively commissioned research to a variety of research organisations, including the CBR. The CBR carried out a study of the impact of the minimum wage on SMEs, by adding questions to its

regular SME survey.⁴ In this way, some of the core CBR research activities on SMEs were modified to take into account user needs, conveyed through one of its members, who at the same time was representing a user organisation.

This networked nature of CBR activities in the field of labour research extended to both inside and outside the group. Simon Deakin, who leads the CBR work on labour market regulations and corporate governance, had his doctoral dissertation examined by William Brown in the mid 1980s. Externally, one of the very few junior researchers who moved from their positions at CBR to work outside academia, was involved in research on labour issues. For instance, Hannah Reed, who worked as a Junior Research Fellow at CBR during the 1997-2000 period in projects funded by the Joseph Rowntree Charitable Foundation and the Newton Trust, proceeded to join the Trades Union Council in 2000 after leaving the CBR. The contacts, inside and outside CBR, which she established during her time at the CBR were maintained afterwards, and from her position at the TUC commissioned Simon Deakin to undertake a study on labour relations.

There is therefore a variety of channels through which impacts in this area of research took place: the paragraphs above have identified networks, researcher mobility, direct policy involvement from the researchers, and contracted work. Additionally, other traditional forms of “broadcast dissemination” were also used. For instance, William Brown found dissemination events organised by the ESRC Programme on the Future of Work useful and which led he and Simon Deakin and other Cambridge researchers to carry out a research project on the “future of collectivism in the regulation of the employment relationship” between 1998 and 2001. These events were well attended by policy advisors and Professor Brown believes that through this channel research results reached politicians.

Further, this area of research was developed through a variety of projects, and it would be unwise to try to assign impact to a specific project or activity. We are facing a long-term research programme supported by funds from different sources and occasionally backed by the ESRC Centre core funding. Sources of support included the DTI, Acas, the ESRC through projects funded through responsive mode, programmes (Programme on the Future of Work), Centre funding, and the Joseph Rowntree Charitable Foundation and the Newton Trust (of the University of Cambridge).

Research activity and policy interest in the research and its results are also explained by a very favourable policy context where research became a key element to develop, monitor and support what was a set of innovative and highly controversial policies. In 1997 the new Labour Government had started introducing legislation increasing Trades Union rights and establishing a minimum wage. In this context there was a policy need for empirical evidence that would guide policy development and implementation and most projects had a clear policy audience interested in the results. CBR’s fieldwork-oriented approach was also

⁴ Three questions were added to the survey and its coverage extended to include cleaning and private security activities.

influential in developing mixed methodologies complementing applied economics panel data with surveys and case studies to generate evidence for policy analysis.

The types of impact were also varied. Several projects showed that the effect of the new legislative measures was negligible, thus allaying fears that more workers' rights would have a negative influence on economic competitiveness. The study on collective bargaining and industrial relations showed that what determined the impact of trades unions was how the employers viewed them and not the legislative framework. The results were used directly by civil servants at the DTI as an evaluation of the impact of the Employment Relations Act, thus confirming that the legislation did not have the feared negative impact. In this way the results were used to *confirm* a policy decision. A different type of impact was the way in which the research on "partnership" led William Brown to facilitate a number of partnership agreements as chair of the "Partnership Board". This was a more direct impact on practice.

In general, the researchers believe that their work had a direct impact on policy, indirect impact on trade union practice, and very little on employers.

The "SME panel survey": the impact of data generation

There is little doubt that the "National Small and Medium Sized Business Survey" is one of the highest profile activities organised by the CBR. The first survey was carried out in 1991 by the CBR predecessor, the Small Business Research Centre. More than 2000 independent firms responded to this first survey. This panel of firms was surveyed again in 1993, 1995 and (the latter two already supported by the core CBR funding). A second panel of 2500 firms in the same sectors and size groups as the first one were surveyed in 1997 and 1999, and a third panel was surveyed in 2002. The SME Survey and the analysis of the data it generated became an integral and crucial activity for the CBR. The longitudinal data sets generated by these panel surveys provided an extremely valuable resource for researchers in academia, government and the private industry.

The SME panel data also provided the main data for contract research assignments for public and private sector clients that the CBR would carry out during this period. These were very important for engaging CBR in policy-relevant work and for continued use by the non-academic community.

The panel data can be accessed and used without strong network links being established, and we found cases in which the data were used by non-academic groups without such additional collaborative links. In other cases, however, the SME survey became a tool to establish new links with and among users. Many respondents pointed, for instance, to the survey launch events as an opportunity to establish links with other practitioners and CBR researchers. Furthermore, several of the users interviewed commissioned further work to the CBR, and through this mechanism they established and maintained close contacts with senior CBR staff. The survey also predated the creation of the CBR, relationships that had been established with users through the first survey, continued and expanded throughout

further surveys and into the CBR activities. In other words, the survey had already placed the team that launched the CBR, and mainly its Director Professor Alan Hughes, firmly on the map before the start of the Centre.

The Survey therefore supports and is supported by a variety of collaborative links with different users and beneficiaries over a long period. Consequently, there is not a single impact of the use of these data but a variety of effects of different intensity. Often, the data and the main conclusions of the survey were helpful to organisations to confirm the adequacy of policies that they have launched. In other cases, studies carried out using panel data were important in the process of policy formation providing evidence that helped shape policies. This variety of applications is linked to the different roles played by government departments within the policy formation process. For instance, the department that made a more extensive use of the SME Panel Data was the DTI; the way in which the DTI contributes to policy formation is itself complex. In some cases it is responsible for launching initiatives of support to industry that it needs to monitor and whose efficiency it wants to monitor.

In other cases it produces data and analysis that contributes to policy decisions at other government levels. Several officials in different DTI offices confirmed the usefulness of the panel data, and of CBR analyses to confirm, develop and justify policy. Particularly, it influenced thinking on the modes of SME assistance by providing, for instance, valuable information on how SMEs accessed finance, as noted above. Furthermore, the data informed Government that SMEs required more support in management training than in financial assistance, that latter of which was a singular aim of Government – this finding helped to shape subsequent DTI policy for support of SMEs. Thus, the CBR work made a “significant contribution” to evidence-based policy research. Some respondents pointed out that the approaches used by CBR, with their mixed methods and reliance on extensive and reliable data, established the type of robust empirical analysis that should count as evidence in “evidence-driven” policy process.

Within the panel survey data, it was the information on SMEs financing that drew more mentions from our “user” respondents. As noted above, the data showed that SMEs, while requiring financial assistance, needed more support in management training. This was not evident to policy makers when they considered the various financial support schemes for SMEs. In other words, “throwing money” at the SMEs would not be enough and would need to be supplemented with other support initiatives.

The data had also been used in other departments and organisations. A Treasury official indicated that CBR data and analysis influenced the definition of UK policy to use the tax system to encourage start-ups. A bank also used the CBR data on SME’s access to finance to crosscheck and confirm the validity of its own data and sources, as well as helping to shape the bank’s subsequent policy on credit and financial support for SMEs in various regions of the UK.

Several of the DTI officials we interviewed were very involved with the Survey and volunteered opinions about their strengths and weaknesses. One pointed out that the data was offered at too high a level of generality and that it overlooked the fragmentation of SMEs in terms of size and sectoral variety; another thought that the data was presented in too fragmented a manner. Many thought the data and the accompanying analysis to be of excellent quality. Whatever the merits of the divergent opinions, that these views were offered indicates that the officials had engaged with the data, which they considered to be an existing or potential source of important and useful information.

The way the data and analysis was used varied considerably from group to group. In some cases there was an “arms’ length” use of the data and the CBR analysis with little involvement from the potential users with the group generating the data.

In other instances, specific research contracts were concluded in which the CBR created new datasets on SMEs to address specific questions provided by clients. These included a study commissioned by the Insolvency Service, an executive arm of the DTI to examine the impact of the Enterprise Act on personal insolvency, which found that the reduction of the discharge period did not affect UK entrepreneurship. Other units in the DTI also contracted several small studies that addressed a number of issues, such as the survival rate of UK SMEs, the comparative innovative performance of European firms, the identification of “middle market firms”, including the construction of a taxonomy of these firms and assessment of their impact firms on UK business performance, and a comparative survey of UK-U.S. innovative performance. The British Bankers Association also commissioned a six-month study to evaluate the training packages for SMEs, which confirmed that Government financial incentives were less effective than training for SMEs. In still other cases, users discussed methodological issues with the CBR. Within this large user organisation, the DTI, we identified different channels of use and application. No specific application mechanism emerged as dominant.

Conclusions

When assessing the policy impact of academic research we should not succumb to a linear view of the relationship between academics and potential users and beneficiaries of academic research. For instance, many of the relevant instances of policy application of CBR research activities emerged from a context of collaboration, where researchers engaged directly with the policy world, through their personal mobility out of academia (a rare event, but occasionally important), through the development of formal policy responsibilities alongside their main academic work, or through strong links with policy makers.

The development of formal policy responsibilities was one of the main ways in which the CBR research agenda was influenced by policy needs (such as in the case of William Brown). The fact that research was carried out “in the context of application” was one of the main factors explaining the impact of CBR’s research on labour relations presented above as one of the impact case studies. Here the relationship was such that the boundaries between

research “producers” and “users” became blurred. In other words, collaboration is established in a bidirectional way, with involvement of users in research development and strong user-researcher networks covering different research projects. In this context, to use the term “impact” to refer to these forms of relationship may be misleading.

Yet, proximity to user needs is not only a way to make sure that the research activities are relevant for policy makers but has played additional roles. First, it helped generate interesting research questions. Simon Deakin, currently CBR Acting Director, reflected that some of the most interesting academic work at the CBR came out of specific questions put forth by users. Second it supported research activities, both through the direct funding of research assignments and by helping CBR researcher in practical matters related to their work. The Chair of the Advisory Board, for instance, worked closely with both senior and junior CBR researcher and, at times provided contacts and help in matters such as the identification of potential research subjects, or by drawing the attention of private sector colleagues to the activities of the CBR.

From this perspective, the social networks that CBR established emerged as one of the most important impact channels. Yet, the amount and importance of networking activities was not randomly distributed among CBR researchers. The way CBR was structured in large part established relevant networks almost exclusively at the top senior levels. Besides, some individuals, like the Chair of the Advisory Board, played a crucial role in the development of the Centre and of its policy and practice impact. These core contacts could be traced back several years before the CBR was set up. The existence of a set of relevant activities that preceded the CBR, and to which the CBR provided continuity (in particular the SME Panel Survey and some of the work on corporate governance) generated a strong user network on which the CBR could build from its inception. Also, in explaining the strength of these links the “Cambridge” brand name (whose importance was repeatedly recognised by junior and senior researchers alike) and the networks that were built around long lasting links with the University did benefit the visibility and impact of CBR’s work.

In addition to the role of networks and the contextual advantages bestowed to the Centre by being part of a top University with its own strong network, there were other important dissemination channels. Publication was important, and interestingly, academic publications appear to have played an important role in non-academic dissemination. Sometimes, we found examples of simpler linear uptake mechanisms where practitioners had used the results and data generated by the CBR, while keeping distant personal relationships. “Arms’ length” relationships did not preclude use.

Core funding provided support for some of the central CBR activities, like the SME surveys, and provided a stable organisational structure that allowed senior researchers developing their careers at CBR to carry out long-term research strategies. ESRC funds therefore provided important structural resources and several users bemoaned the termination of this funding. Yet, many of the projects that were mentioned by researchers and users as having been particularly influential were related to specific research contract assignments with user

organisations and to research projects that were funded through other sources. Additionally staff from other faculties, with a “research associate” status at CBR also played a key role in projects with high policy relevance and impact levels. Often core funding provides background support, but high-impact research is often, and naturally, associated with research assignments led by specific user concerns.

Finally, we find that among the policy audiences that the CBR work targeted, research makes a contribution as a further input into a complex and long-drawn policy process. “Use” can be defined in terms of a contribution to the policy process, in the shape, for instance of inputs into policy discussions and by supplying of evidence to inform these discussions. This is a less direct type of use and application than we would expect in other contexts. For instance, we could expect some elements of management research to make direct, easily identifiable impacts in corporate management practice (by introducing new methods or establishing new processes as suggested by analysts). It is however in the nature of CBR’s research that it finds its natural audience in policy circles where the influence of research is of a more indirect nature as an input into complex policy formation processes.

Methodological discussion

Impact assessment issues

The call for tender asked for an assessment of the extent to which it is possible to attribute specific cases of impact to a specific ESRC investment. “Attribution” is one of the common problems of any evaluation and impact assessment in this or any other area of public policy.⁵ Yet the problem is compounded when applied to the analysis of research projects and programmes. Researchers seldom conceptualise their work on a project basis; instead they blend funds from different sources to support a series of research activities to be carried out by individuals or teams. It is often for reporting purposes that the illusion of research projects neatly aligned with research activities is created (Rogers, Bozeman and Chompalov 2001; Spinardi and Williams 2005). Rogers et al. (2001), argued that this is especially the case in long-term “projects” carried out by productive teams. Our research confirmed these difficulties.

The CBR is a research centre, not a project or a set of projects. As specified above, funding was received from a diversity of sources (see *Background*). Consequently, many researchers involved in the Centre were not funded by the ESRC, neither did they participate in research initiatives directly supported by the “core funding” derived from the ESRC investment. Although the core funding supported some researchers throughout their association with the Centre, they were in the minority. There is also no relationship between the source of funding and the importance of the role that a researcher played within the CBR; for instance, all the Assistant Directors had their work within the CBR

⁵ See for instance (Cave and Hanney 1996; Buisseret, Cameron and Georghiou 1999).

supported by the University. Further, the CBR leveraged the ESRC investment by assigning lead researchers from other departments and universities to core-funded projects.

Attribution of research results and impact to ESRC core-funding faces additional difficulties stemming from the CBR operational practices. Although there is a core of leading researchers who have been involved with the CBR for most, if not all, of its existence, there was a high mobility of junior researchers. About 70 researchers worked at the Centre during the 10 years under assessment, but seldom more than 20 at any single point. This mobility offers a potentially important channel for the transfer of capabilities gained at the Centre to business and policy contexts, and we have traced the “post-centre” activity of a number of junior CBR researchers. Yet, personnel mobility compounds the flexible funding arrangements: in many cases researchers moved across different research projects and were accordingly funded by a diversity of sources.

Under these circumstances it is difficult to disaggregate on the basis of funding source the specific impacts of a body of research. In other words, it is hard to trace which impacts *attributable* to the Centre activities are also attributable to the ESRC’s funding of the Centre. Isolating the effects of a single source of funding is virtually impossible. Yet, understandably, funding bodies wish to know the effects of *their* initiatives: have *they* made a difference? That they have played a contributory role to the success of an important research group offers, in itself, little guidance for future allocation decisions. Therefore, despite the lack of correspondence between the administrative tools of resource allocation and actual research practices, an impact assessment like the current one attempts to identify the type of activities that have been supported with the funds provided by the initiative under assessment. It is important to note the projects, researchers and activities that the Centre was able to support thanks to the ESRC core funding. This does not mean that we should try to *isolate* those activities directly funded by the ESRC, and limit the analysis to those.

First, there are activities that were not directly funded by the ESRC (like the work carried out by the Assistant Directors) but would not have taken place without the core funding. In other words the Centre leveraged the funds granted by the ESRC, and generated *additional* activities, even when the core grant did not directly fund these activities. These additional activities should be considered in an impact assessment. Second, not only would it be impractical to attempt to isolate grant-funded activities from the rest of CBR work, but such an attempt would not do justice to the way in which research activities are in fact carried out within research centres.

There is no shortcut or “golden bullet” to solve this problem. In this case, our study has analysed the policy and practice impacts of the CBR activities during the 1994 and 2004, considering both actions supported by core funding and other relevant research and outreach activities. Through interviews with the Centre Director, Assistant Directors and Senior Research Fellows we identified instance of impacts derived from all kinds of projects carried out by the CBR. We have established the funding structure of these activities and the role that the core funding has had in enabling their realisation. Further, the junior

researchers selected for interviews had to have been supported for at least 1 year FTE by core funding. In this way we focused on the results that could be attributed to the ESRC funding without ignoring other connected Centre activities.

Advantages, shortfalls and transferability of the approach adopted

The different main instruments that the ESRC uses to channel its investments (responsive mode, programmes and centres) call for slightly different approaches to evaluation. This is due to the different ways in which they organise research and dissemination activities, and the different nature of the research subject: programmes and centres provide a way of binding a specific set of interconnected research activities supported by central management and dissemination services, “responsive mode” activities are dispersed and it is then more difficult to identify which projects to follow and how to structure an assessment process. Similarly, as tasks and responsibilities are organised differently in the different instruments, the questionnaires have to be tailored to take account of these differences.

There are also important differences among ESRC-funded Research Centres supported by the same instrument. Some of the issues we have had to address in this study are not necessarily common to all Centres. The CBR had substantial additional funding, a proliferation of research projects, and a high turnover of junior researchers. We had to make difficult decisions concerning the selection of researchers to interview and the activities to include. Other Centres with a more stable junior researcher base, and a more limited set of activities supported outside the core funding, would provide a clearer target for assessment and present lesser “attribution” problems. In the case of the CBR, it is possible to present an assessment of the impact of the Centre activities during the period under investigation but it is much more difficult to attribute these impacts to specific funding sources, and assess the “additional” changes that the ESRC-funding generated. In our case, we did not attempt a systematic assessment of the specific impact of ESRC core Centre contributions but we endeavoured to assess the policy and practice impacts of the Centre activity during the period in which it received ESRC core funding.

Opening the research to the broader set of activities that the Centre conducted yielded however interesting results. As we argued in our methodological discussion researchers do not segment their activities according to funding lines, and in the case of the CBR, some of the most interesting impact processes combined the joint work of core-funded researchers and senior research associates who, even without being full members of the CBR channelled their research contracts through it. Cutting out the research activities of Research Associates our research would have provided a poorer picture of the CBR activities and of the way in which ESRC core funding combined with other research activities and network contacts that led to substantial policy impacts. When assessing Centre investments it is important to evaluate the whole range of Centre activities regardless of funding source, although an awareness of the different income sources that support the work is necessary in order to build a fuller picture of the impact processes and of the contributions of different projects and activities to such processes.

Further, although the contexts of application are very different, the conceptual framework we have devised for this study is applicable across different investment instruments. The structure has allowed us to differentiate the role of different dissemination mechanisms and has helped us understand how a specific approach to Centre management is associated with specific forms of knowledge interaction and impact processes (in our case, for instance, the importance of network activities was limited to the most senior CBR members, reflecting a structure where stability at the core of the Centre combined with rapid mobility among junior researchers and assistants).

Finally, our approach tried to expose the importance of contextual issues in the explanation of policy and practice impacts. The importance of contextual issues had been abundantly discussed in ESRC-organised evaluation workshops and studies, but had not yet been systematically explored in evaluation practice. Our attempt here was exploratory, and through the questions we devised we were unable to gain too much detail about the ways in which context matters in the diffusion and impact processes. It became clear that the CBR status as a University of Cambridge Centre was very helpful, both for junior researchers trying to secure interviews and gain access to research subjects, and for more senior staff who were able to build high-level contacts thanks to existing networks and reputational effects. Furthermore, some of the high impact research we encountered addressed issues that were of particularly policy importance at that specific time: timing in terms of the alignment of research lines with policy needs revealed itself as an important impact factor. Such alignment depends on the political context. Finally, almost all the “users and beneficiaries” were drawn to seek help and information about the CBR because of specific policy and practical problems they were facing. Yet these conclusions are hardly unique, but as noted above, we were unable to draw much detail from the “contextual questions” we devised. There is no doubt, and our research further confirms it, that contextual elements must be introduced in impact assessment and evaluation practice; but this is a complex matter requiring new research designs.

References

- Buisseret, T. J., H. C. Cameron, et al. (1999). "What difference does it make? Additionality in the public support of R&D in large firms." International Journal of Technology Management **10**(4/5/6): 587-600.
- Cave, M. and S. Hanney (1996). *Assessment of Research Impact on Non-academic Audiences: Consultants' Report*. Uxbridge, Faculty of Social Sciences, Brunel University.
- Davies, H., S. Nutley, et al. (2005). Assessing the impact of social science research: conceptual, methodological and practical issues. ESRC Symposium on Assessing Non-Academic Impact of Research, London.
- Majone, G. (1989). Evidence, Argument, and Persuasion in the Policy Process. New Haven and London, Yale University Press.

- Martin, B., A. Salter, et al. (1996). The Relationship Between Publicly Funded Basic Research and Economic Performance. A SPRU Review for the UK Treasury. Brighton, SPRU.
- Molas-Gallart, J. (2000). Assessing Research Impact on Non-Academic Audiences: Model questionnaires and interpretation guidelines. Brighton, SPRU.
- Molas-Gallart, J., P. Tang, et al. (2000). "Assessing the non-academic impact of grant-funded socio-economic research: results from a pilot study." Research Evaluation 9(3): 171-182.
- Molas-Gallart, J., Tang, P., Sinclair, T., Morrow, S., Martin, B. (1999). Assessing Research Impact on Non-Academic Audiences. Brighton, SPRU.
- Nutley, S. (2005). Types and models of research impact. ESRC Symposium on assessing the non-academic impact of research, London.
- Pettigrew, A. (1990). "Longitudinal Field Research on Change. Theory and Practice." Organization Science 1(3): 267-292.
- Rogers, J. D., B. Bozeman, et al. (2001). "Obstacles and opportunities in the application of network analysis to the evaluation of R&D." Research evaluation 10(3): 161-172.
- Spinardi, G. and R. Williams (2005). The Governance Challenges of Breakthrough Science and Technology. New Modes of Governance. Developing an Integrated Policy Approach to Science, Technology, Risk and the Environment. C. Lyall and J. Tait. Aldershot, Ashgate: 45-66.
- Tyden, T. (1996). "The contribution of longitudinal studies for understanding science and communication and research utilization." Science Communication 18(1): 29-48.
- Weiss, C. B. (1980). "Knowledge Creep and Decision Accretion." Knowledge : Creation, Diffusion, Utilisation 1(3): 381-404.

Appendix. Example of questionnaire format: the researcher questionnaire

Note that all questions were open or semi-open. Whenever we provided alternatives for the respondent, we pursued further details through targeted discussion.

Interviewee profile

1. During what period were you working within the CBR?
2. What was your position(s) during your involvement with CBR?
3. What percentage of your salary were you drawing from CBR core funding?
4. What percentage of your time was allocated to CBR activities?
5. What was your main area of research within CBR?
6. What other activities, apart from research, did you carry out for CBR?
7. Since ESRC core funding for the centre, or your work for it, ended, what have you done?

Networks 1: Before CBR

8. Before your work for the centre, did you work or have regular contact with practitioners related to your main area of research? Who?
9. What was the nature of these contacts?

Informal advice/informal contacts _____

Interviewed them/used them as case studies for research _____

Collaborated in research projects with them _____

Carried out contract research for them _____

None _____

Other (specify) _____

10. What was their frequency?

Occasional _____

Regular but infrequent (less than once every three months) _____

Frequent (more than once every three month) _____

Frequent and close (research collaboration) _____

Networks 2: Generated or strengthened through the research project

11. During the conduct of the research, did you get in touch with non academic practitioners and users?

Yes No

12. Approximately, how many?

13. Where these contacts the same as you had before your work for CBR?

14. What was the nature of these contacts? (tick as many as applicable)

Informal personal contacts _____

Interviewed them/used them as case studies for research _____

Research collaborators _____

Collaborators in other research projects _____

Carried out contract research for them _____

Other informal contacts through centre activities _____

Not applicable (no contacts) _____

Others (specify) _____

15. During the conduct of the research how often did you meet/talk with these contacts?

Occasionally _____

Regularly but infrequently (less than once every three months) _____

Frequently (more than once every three month) _____

Frequently and closely (research collaboration,...) _____

16. Are you still in touch with them? If so, who and how?

17. What is the purpose/nature of the present contacts?

18. Overall, do you think that the links between researchers and users increased as a result of the study?

19. Can you tell me the names of some potential users of this research with whom you were in touch, who we could contact for further interviews?

Project Outputs

20. During your work with the Centre, or as a direct consequence of it, which of the following did you produce or help produce?

Project reports _____

Journal articles reporting project results _____

Conference and other papers reporting project results _____

Magazine articles reporting project results _____

Newspaper articles reporting project results _____

- Presentations or interviews with the Media* _____
- Presentations to user audiences* _____
- Other* _____

Did you contribute to any of the following?

- CBR newsletter/webpage* _____
- Other Centre publications* _____

21. Which of the outputs listed in the previous question is of greatest value to you?

Forms of Use

22. Do you think that non-academics have benefited from the research carried out? In what way?

- Non-academics did not benefit* _____
- They were provided with **tools** to solve problems* _____
- They were provided with **data** to solve problems* _____
- They were provided with arguments to **justify** policies/ strategies/ courses of action/decisions that they were planning to undertake* _____
- They were provided with **Confirmation** that existing policy/strategy/course of action/decisions were soundly based* _____
- The results **helped them develop** policies/strategies/courses of action/decisions* _____
- Others (specify)* _____

23. Can you give us examples? (check whether any case of application of tools/techniques/methods required further development/adaptation)

Tracing post-research activity

24. Have you been involved in non academic work since the project?

- Commissioned projects* _____
- Contract research* _____
- Secondment to industry (state period)* _____
- Advisory role, paid/unpaid , to non academic organisation* _____
- Committees* _____
- Collaboration in projects with users* _____
- Other* _____

25. Have you worked with practitioners to address issues raised by them by applying

Skills/knowledge gained in the course of your CBR work

Methodologies/tools/techniques developed in the course of CBR work

Skills/knowledge developed during your previous academic work

Methodologies/tools/techniques developed during your previous academic work

26. Can you give us examples?

Context

Characteristics of the transfer agent

27. What incentives did you have to get in touch with non-academics during your work at CBR?

28. Were you given any specific resources to establish contacts outside academia? Which ones?

Characteristics of the recipient

29. What were the main difficulties in establishing non-academic contacts?

30. Did you feel the attitudes of non-academic “partners” change as your research at CBR progressed?