

**SELF ASSESSMENT AS A TOOL TO
MEASURE THE ECONOMIC
IMPACT OF BERR POLICIES - A
BEST PRACTICE GUIDE**

Main report

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On 5 June 2009, following completion of this report, the Department for Business, Enterprise and Regulatory Reform (BERR) and the Department for Innovation, Universities and Skills (DIUS) merged to form the Department for Business, Innovation and Skills (BIS).

Self assessment as a tool to measure the economic impact of BERR policies - a best practice guide

Main report

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1 BACKGROUND

The Department for Business, Enterprise & Regulatory Reform (BERR) commissions research that is designed to evaluate the impact of its policies, programmes and projects on improving the productivity and competitiveness of UK businesses and the UK economy, among other things. In particular, this research aims to determine whether the policy brought about the desired changes or had the desired impact, or whether these changes or impacts would have happened anyway, irrespective of the policy being introduced. Such research questions can be difficult to answer and BERR, in recognising these difficulties, commissioned the Questionnaire Development and Testing (QDT) Hub at NatCen to develop and test a survey methodology for measuring the impact of its policies, programmes and projects on businesses that would overcome these. This report summarises this work, highlighting key design issues that need to be considered not only for surveys aiming to measure economic impact but also more generally for surveys of businesses.

1.1 Research aims and objectives

BERR frequently uses telephone surveys to elicit companies' self-reports on the impact of the support received. For the respondents representing firms to provide such information a number of relatively complicated and detailed questions on profits, overall cost and economic benefits need to be asked.

The collection of such information needs to be undertaken with care. The design of data collection instruments and procedures are integral to the quality of the information obtained. In all surveys (and data collection exercises generally) there is the risk of errors being made. If these occur systematically then they lead to what statisticians call biases, which can affect the accuracy of the results obtained. The most commonly cited are response, sampling, interviewer, non-response and coding biases. In addition the mode of data collection, the wording of questions and the order in which they are asked, and the selection of the most appropriate person to provide the information being sought can also introduce bias. The following table provides a summary of commonly acknowledged **response biases** or distortions that can challenge the quality of survey data.

Table 1-1 Summary of response biases

Bias	Description
Strategic bias	Response anticipates potential use of information and tries to maximise self-benefit – participation in survey also affected
Cognitive bias	It is costly to gather and process mentally information required. Proxies are provided.
Interviewer bias	Respondent provides answer she thinks will gain approval from interviewer
Warm glow bias	When asked how much they would be willing to pay for a public good, respondents don't assess the magnitude of the impact but just the opportunity to contribute to a good cause.
Scope bias	Respondents fail to assess the magnitude of services they are asked to value – value equally part and whole of public good.
Property right bias	If respondents feel entitled to it, they would refuse to provide measures of willingness to pay for a good or service

Measuring the counterfactual, i.e. 'what would have happened had the policy or programme not been put in place' is an important task for BERR in assessing the success of its policies, programmes and policies aimed at improving the productivity and competitiveness of UK businesses. However the measurement of the counterfactual raises the challenge of how to attribute observed outcomes to the policy in general or specific aspects of it. Experimental methods are used in most sciences to address this type of question and have recently become more commonplace in social sciences and policy evaluation.

The value of such experimental methods is recognised by researchers and economists within BERR but such methods have not tended to be used for a number of reasons.

- The resources needed to do experimental research for new policies in some cases can be even greater than the cost of the delivery of the policy.
- Experimentation also implies considerable opportunity costs as it requires the exclusion of a sector of the population from the "anticipated" benefits.
- Suitable experiments with controls cannot be implemented for interventions when the treatments cannot be meaningfully constrained to a subgroup of the population, as it occurs with many regulations. Markets characterised by competition, entry and exit imply that indirect effects also need to be carefully considered.

Instead BERR has largely viewed beneficiaries as being able to provide evidence on the effectiveness of its policies and adopted a self-assessment approach to collecting information on the economic change and measuring the counterfactual. However it is recognised that this methodology is not ideal. A number of questions emerge from the reality of limits to the applicability of experimental methods and the reliance on beneficiaries for the evidence on the impact of support products.

- Can we rely on what 'beneficiaries' say about the intervention?
- What is their ability to provide us with an accurate description of the economic impact of the support received?
- If so, which would be the best way of gaining this information from them?
- How can we best use that information to inform a policy-relevant assessment of the policy that generates the support?

This study was concerned with exploring these issues and in proposing a new methodology that would improve the validity¹ and reliability² of economic impact data. It concentrated on one project in particular – the Business Support Cross Product Monitoring (or "Beneficiaries") Survey. This is a survey of businesses that use various BERR interventions and includes questions about how these interventions have impacted on the business financially. A summary of this survey is contained in Appendix A.

1.2 Methodology

This study involved the evaluation of existing practices for collecting information on economic change and measuring the counterfactual within BERR using a multi-method approach. First, three varying surveys, selected by the BERR project steering group, were reviewed and critically assessed using a set of best practice criteria designed for this purpose. Specific details of our review of these three surveys were supplied to BERR when this report was originally

¹ Validity refers to the extent of matching, congruence, or 'goodness of fit' between the questions asked and the concept it is purported to measure. i.e. are the questions measuring what was intended?

² Reliability is concerned with questions of stability and consistency (repeatability). Is the operational definition measuring 'something' consistently and dependably, what ever that 'something' may be? Do repeated applications of the operational definition under similar conditions yield consistent results? If the study was to be carried out again, would it produce the same findings?

produced but have been removed for publication. This is due to the fact that we were only able to ascertain a partial view of each survey as it was not possible to access all records. In some cases records were not kept and where previous staff members had moved on, it was impossible to collate all information required to conduct a full review.

Second, questions asked on the Beneficiaries Survey (wave 5) concerned with collecting information on economic change and measuring the counterfactual were subject to cognitive testing. The cognitive testing we conducted used questions from the fifth wave of the Beneficiaries Survey: existing questions were tested at the first round, revised and the new versions tested again at a second round. Finally, taking on board the findings from both these stages of work, a final set of recommendations were made on the methodology that should be used. Further detail on each of these stages is provided below.

1.2.1 Stage 1: review of existing surveys

The evaluation of the existing surveys involved:

1. reviewing the relevant methodological and labour market literature to develop an evaluative framework that could be used systematically to assess each of the three survey's;
2. appraising relevant and available survey documentation, principally published reports;
3. conducting qualitative, depth interviews with key stakeholders in each of the surveys being evaluated, either in person or over the telephone. These were survey commissioners, policy customers and data users at BERR and survey contractors who had been responsible for the design and/or implementation³; and
4. carrying out scoping (qualitative one-to-one) interviews with a small number of potential respondents to the Beneficiaries Survey⁴, to provide a 'survey user' perspective. Again these were conducted either face-to-face or by telephone.

The interview guides used with stakeholders and potential survey respondents are contained in Appendix B. Interviews were audio recorded, the recordings being reviewed and detailed notes made on each interview. Those participating in the scoping interviews (point 4 above) received £20 as a token of our appreciation for them taking part.

The evaluative framework was then applied to each survey, and an assessment made on each criterion using evidence obtained from 2-4 above. As a result of this process a preliminary set of findings were presented to the BERR project steering group. Discussion of these findings fed into stage 2, specifically which questions should be subjected to cognitive testing.

1.2.2 Stage 2: cognitive testing of survey questions

The testing of survey questions asked on the Beneficiaries Survey, concerned with collecting information to allow the measurement of economic change and the counterfactual, involved the use of cognitive interviewing methods to explore the mental thought processes respondents used to answer these. Specifically these methods focus on four stages: how respondents understand and interpret survey questions; how they recall information that applies to them; the judgements they make as to what information to use when formulating their answers; and how they respond.

Two rounds of testing were carried out: 14 interviews were conducted to test the existing Beneficiaries questions. In light of the findings from this first round the questions were revised and a further 16 interviews were conducted to test these 'improvements'. Respondents were purposively selected from BERR records of successful applications, and included businesses of

³ It was not possible to interview all types of stakeholder for each survey within this study's timetable.

⁴ By potential respondents we mean cases identified from BERR records as having successfully applied for one of the six products covered by the Beneficiaries Survey.

different sizes as well as multi and single site operations. Interviews were sought with businesses that had received each of the six products covered by the survey. Although the Beneficiaries survey is conducted by telephone the cognitive interviews were conducted face-to-face. This is standard practice, as this type of interview relies on interviewer observation and the training and continual motivation of respondents.

The format of the cognitive interviews was as follows: respondents were asked the survey questions and their answers recorded on a paper questionnaire. They were asked to think aloud as they answered the questions, and specific issues were followed up using retrospective probes. The interviews were audio recorded; the recordings reviewed and detailed notes made. These notes and recording were then analysed using a content analysis approach. (For further details on the cognitive testing methodology used refer to the stage one and two cognitive interviewing reports^{5,6}).

1.2.3 Stage 3: recommendations

Having conducted stages one and two, described above, we reviewed all of the evidence and made a series of recommendations relating to:

- the conduct of the Beneficiaries Survey specifically and surveys concerned with measuring economic impact more generally; and
- further research into issues that came to light as part of this study but fell outside its scope.

1.3 Structure of this report

Chapter 2 details the first stage of this work, describing the way in which we went about developing the evaluative framework we used to assess the three surveys under consideration. As mentioned earlier, in section 1.2, this report does not contain details of how each of the three surveys rated in terms of our best practice criteria. Chapter 3 summarises the findings from the two rounds of cognitive testing; the first focussing on existing questions concerned with measuring economic impact, asked as part of the Business Support Cross Product Monitoring Survey (Beneficiaries), and the second testing newly revised versions of these questions. Chapter 4 contains our final recommendations on the methodology that should be used to evaluate the economic impact of BERR interventions and policies, and suggestions for future work.

⁵ McGee A, Andrews F, Legard R, Collins D (2009) Self Assessment as a Tool to Measure *the Economic Impact of BERR policies: findings from stage one cognitive testing*.

⁶ McGee A, Andrews F, Legard R (2009) Self Assessment as a Tool to Measure *the Economic Impact of BERR policies: findings from stage two cognitive testing*.

2 REVIEW OF EXISTING SURVEYS (STAGE 1)

The aim of this first stage of the research was to review three surveys commissioned by BERR⁷ to assess their validity and reliability specifically in relation to measuring economic impact. All three surveys reviewed were cross-sectional, that is, respondents were sampled and interviewed at one period in time only. The following year a new sample of businesses is selected. BERR has some experience of conducting longitudinal surveys, that is, where respondents are interviewed a number of times over a number of years, though these surveys did not form part of our review. One of the surveys evaluated was the Business Support Cross Product Monitoring (“Beneficiaries”) Survey, and a summary of it is contained in Appendix A.

In the first instance we developed an evaluative framework that comprised of a set of best practice criteria for conducting surveys specifically designed to assess the economic impact of interventions although many of the criteria also apply to the design of surveys in general. These criteria reflect what are considered in the survey methodology literature to be important constituents of survey quality. We then conducted a review of whether the three surveys had met each criterion. This chapter describes this process, firstly setting out the evidence we sought to be able to review the surveys, secondly describing the rationale that underpinned the development of the framework criteria, thirdly presenting the framework that we developed and fourthly summarising key principles that emerged from the review.

2.1 Methods employed in the review of BERR surveys

The review of the three BERR surveys against the evaluative framework (best practice criteria) we developed involved: (a) desk review of existing data and documentation that were made available to the NatCen research team; and (b) interviews with three important groups:

- key members of staff at BERR for each of these three surveys, to identify problems with existing data collection methods and survey questions;
- the contractors for two of the three surveys to understand their role in the design and development of the surveys, and the nature of (any) problems with the implementation of the surveys; and
- previous survey recipients⁸ that examined whether respondents were able to provide the required information in the current format.

Appendix B contains copies of the interview guides used with these groups.

In relation to the third group – previous survey recipients - we conducted a few preliminary scoping interviews with businesses who had received one of the products covered by the Beneficiaries Survey, to give us some flavour of the problems that survey respondents can face in providing detailed financial information. This interview evidence was examined alongside a review of survey documentation supplied by BERR and the relevant methodological literature.

2.2 Designing surveys

Surveys are usually undertaken to provide statistical (quantifiable) information on the characteristics, behaviours, attitudes and so on of a given population. They are often (though not always) designed to provide specific information that will answer predetermined research questions. In designing a survey the research team have to make a number of decisions that

⁷ BERR provided guidance on the surveys to be reviewed.

⁸ Respondents had previously taken part in the Business Support Cross Product Monitoring Survey (Beneficiaries) and had agreed to be contacted again in the future.

can affect its 'quality'. In making these decisions both commissioners and researchers need to be aware of what the implications of these might be. The Cabinet Office has produced a useful guide for government researchers on the issues to consider in designing surveys, particularly for evaluation of policy entitled: ***The Magenta Book, Guidance Notes for Policy Evaluation and Analysis*** (http://www.policyhub.gov.uk/magenta_book/).

The design of surveys involves making conscious decisions, which need to be guided by two overriding considerations:

- the factors that contribute to survey quality; and
- awareness of potential sources of error.

2.2.1 Survey Quality Indicators

The issue of 'quality' in surveys, and how this is defined and measured, must naturally be of importance to those commissioning surveys. The Office for National Statistics (ONS) has produced a set of guidelines about what constitutes survey quality and the criteria used for assessing it⁹. It takes as its basis the six dimensions for assessment of survey quality compiled by the European Statistical System (ESS), namely: *Relevance; Accuracy; Timeliness and punctuality; Accessibility and clarity; Comparability and Coherence*.

The guidelines make the point that, ideally, it should be possible to directly measure a particular aspect of quality. However, in practice this may be time-consuming and difficult to do. Instead, it is possible to make an assessment of quality by means of "quality indicators" that provide sufficient insight into the standard of quality achieved.

Table 2.1 is a synthesis of the key quality indicators, based around the six ESS dimensions of quality, which are identified in the ONS guidelines. It also shows the issues to be considered when assessing them.

⁹ These guidelines can be viewed at <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=13578>

Table 2.1 Quality indicators

Quality indicator	Issues to consider in assessing
Research commissioner	Can influence respondents' willingness to take part in survey and/or answer particular questions
Aims of research	Need to be clearly defined in order to assess whether the research design is able to meet them
Who carried out research	Credibility of survey organisation and whether quality systems in place
When data collected	Date of publication may affect the relevance of the data in light of any subsequent changes in the phenomena being measured
Sample size	Size of issued sample must be given in order to estimate response rate
Target population	Important for judging whether the survey measured what it set out to measure. Survey results could be undermined if key groups missing
Respondent selection	Selection method (e.g. quota or random probability) needs to be clear for any subsequent weighting to be carried out
Mode of data collection	Important for considering the implications for the representativeness of the survey and how people responded to questions
Questions asked	The wording of the questions and the response options can influence respondent answers
Question ordering	The order in which questions are asked can affect the way in which respondents answer them. This applies particularly to attitudinal questions
Respondents' ability/willingness to answer q's	The levels of item non-response will give an indication of this
Who was asked the q's	Important to know who the questions were asked of
Response rate	Important way of assessing the representativeness of a survey
Sampling error	Sampling errors could have big practical and financial implications if the survey estimates are used for planning of resources
Weighting of data	This is done to correct for unequal probabilities of selection and non-response. Can lead to an increase in standard errors
Full survey report	The information given in a report may help the reader to interpret the key findings: assessing base sizes, calculating confidence intervals and assessing statistical significance
Transparency of methodology	To enable accuracy and comparability with other survey findings to be assessed

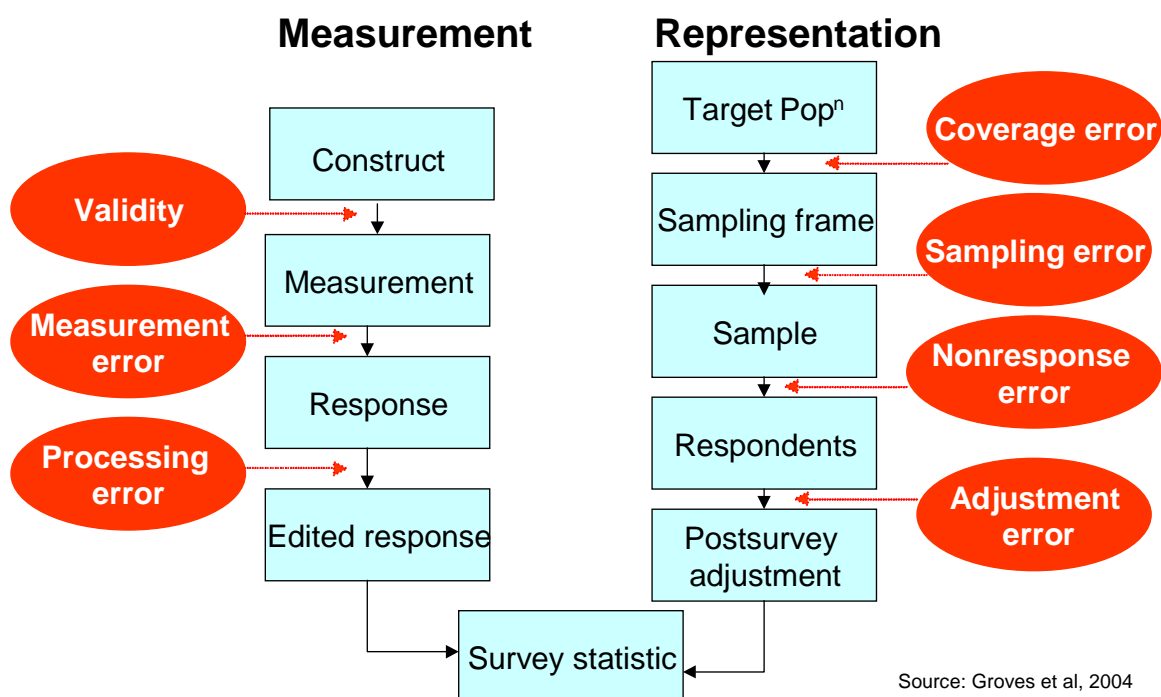
2.2.2 Sources of error in surveys

All surveys are prone to error, which can occur as a result of problems with its measurement or representation.

- Observational error (**measurement**) pertains to inaccuracies in the answers recorded as being given by respondents and the relationship of these answers to the underlying attribute or concept being measured.
- Non-observational error (**representation**) pertains to deviations of a statistic estimated on a sample from that on the full population.

Figure 2.1 below illustrates these sources.

Figure 2.1 - Sources of error in surveys¹⁰



Let us look at these sources of error in a little more detail.

Validity – is the match between what we are intending to measure and what we are actually measuring (known as construct validity).

Measurement error – the observed gap between the ‘true’ value and the response obtained. If the measurement error is systematic then this will result in response bias.

Processing error – results from coding and editing. For example, miscoding answers to the ‘wrong’ answer category.

Coverage error – results from imperfections in the sampling frame, i.e. missing eligible people or businesses from our target population.

¹⁰ Based on Groves RM, Fowler FJ, Couper MP, Lepkowski JM, Singer E, Tourangeau R (2004) *Survey Methodology*. Hoboken, New Jersey: Wiley.

Sampling error - results from the way in which the survey sample is drawn. There are two types of sampling error. First, there is the sampling error that arises when some members of the sampling frame are given a much reduced (or no) chance of selection. This can result in survey estimates that are biased compared with what one might find in the population. Second, sampling error can occur through sampling variance that arises by chance when drawing the sample. This type of 'error' will affect the precision with which estimates can be made.

Non-response error - results from missing information about all sample members i.e. because some businesses did not take part in the survey or answer a particular question.

Adjustment error - resulting from weighting or imputation. Sometimes these methods can make things worse rather than better, for example because imputation strategies can assume that results obtained from respondents apply to non-respondents as well. Such an approach can therefore magnify non-response bias rather than reduce it.

In designing surveys, researchers try to minimise these errors and, for some errors such as sampling error, to measure them. As mentioned in section 2.2, there is interplay between the sources of error that can occur in surveys and measures of quality. This does not mean necessarily that a high quality survey will have few sources of error (some error in surveys is inevitable). Rather the survey's design and implementation should recognise the possibility of different types of error occurring (presented in Figure 2.1) and put in place measures to try to minimise these. However, quality in surveys is not solely about minimising error: it is also about producing a product that is useful, timely, comparable and represents value for money. In developing our evaluation criteria, we have adopted this wider view of quality.

2.3 Measuring economic impact

So far we have discussed the principles that should inform any survey design, including those concerned with measuring economic impact. In addition, however, such surveys involve two additional important considerations; namely how to measure:

- economic change; and
- the counterfactual – what would have happened if the business had not received the support, had not had to comply with the regulation etc.

Measurement of economic change is based on the premise that businesses collect and retain economic performance information, i.e. they keep business records. The keeping of such records is largely determined by management needs, regulatory requirements and accounting standards. Whilst it is likely that most (if not all) businesses keep some records, the way in which these are kept, organised and updated varies, particularly by size of organisation. One of the greatest challenges faced by business surveys is the identification of an individual who has sufficient knowledge of the organisation's records (what is collected, where they are held, what these data mean) to be able to provide the information being sought, and who is willing to take part.^{11,12} In practice, the kinds of information being sought often mitigate against there being one person who can act as respondent. Furthermore knowledge of what records are held and the rationale for why certain strategic decisions were made often resides with those in positions of authority, which may not have direct access to the actual records, and may be too busy to participate in the survey. In some cases the task of 'responding' to the survey request will be 'delegated' – but with the cost that the nominated respondent is not best placed to provide (all of) the information being sought.¹³

¹¹ Groves R, Cantor D, Couper M, Levin K, McGonagle K, Singer E (1997) Research Investigations in Gaining Participation from Sample Firms in the Current Employment Statistics Program. *Proceedings of the ASA Section on Survey Research Methods*. Alexandria, VA: American Statistical Association.289-294.

¹² Tomaskovic-Devey D, Leiter J and Thompson S (1994) 'Organization Survey Non-Response'. *Administrative Science Quarterly*. 39:439-457.

¹³ Willimack DK, Lyberg L, Martin M, Japac L, Whitridge P (2004) 'Evolution and Adaptation of Questionnaire Development, Evaluation and Testing Methods for Establishment Surveys'. In S Presser, JM Rothgeb, MP Couper, JT Lessler, E Martin, J Martin, E Singer (Eds) *Methods for Testing and Evaluating Survey Questionnaires*. Hoboken, New Jersey: Wiley. 385-407.

These issues cut across some of the more general points raised earlier in this chapter, particularly in relation to respondent selection, the questions being asked (refer to Table 2.1) and the sources of error that may arise; specifically measurement error and non-response error (refer to Figure 2.1). However they are of particular importance to surveys concerned with providing information to be able to assess economic impact, because of the need to:

- a) have reasonably accurate financial information from which to calculate 'change'; and
- b) measure the counterfactual, and thus economic impact of the programme, service or product on businesses and the economy.

BERR business surveys rely primarily on respondents' self-assessment of the counterfactual, rather than using more objective measures derived from experimental or quasi-experimental evaluation designs. There are good reasons for this: experimental and quasi-experimental evaluations of business services and assistance can be difficult and costly to implement. Difficulties include problems in defining and identifying a 'control' or 'non treatment' group. However, there are also drawbacks in relying on respondents to provide reliable information about hypothetical counterfactual scenarios. For a respondent to consider the counterfactual, she needs to know or have ready access to a lot of information about the business's performance and knowledge of relevant strategic decisions. As discussed earlier in this section, one person may not have all of this information and be willing (or able) to spare the time to provide it. Even when the respondent does have all the necessary information it is also important to remember that different types of respondents may interpret the question in different ways, using a variety of cognitive processes, meaning answers may not be comparable. Crucially, different people doing the same job in the same organisation may have very different views as to what the situation might have been in the absence of the service or assistance. If those differences of opinion are systematically linked to characteristics that are not captured when analysing the data they can bias estimates of the effects of BERR interventions. A well-designed questionnaire can address these problems to some extent but it is important to bear in mind that some level of inconsistency in respondents' interpretations of the question will always remain.

The evaluative framework developed included some specific criteria that focused on the measurement of economic impact, which reflect the issues discussed here.

2.4 Evaluative criteria

Taking on-board the aforementioned considerations of data quality and measurement error, we developed a set of general criteria to evaluate the three BERR surveys. These criteria can also be seen as reflecting best practice in developing and implementing surveys and could be used to evaluate any survey. In addition to these general criteria a set of specific criteria were developed, to assess whether each survey fulfilled its objective of measuring the economic impact of the policy or intervention. The following tables display both sets of criteria, along with an accompanying full description.

2.4.1 General criteria

Criteria	Description
1. Research aims	
a) Measurement objectives clearly set out	The aims underpinning the research need to be clearly formulated and communicated. The objectives should be easy to understand, short, succinct and to the point. It needs to be clear exactly what the research is intended to measure . A supporting rationale for why the data are being sought and how they are intended to be used assists in communicating these clearly. Furthermore, the objectives need to be achievable in the sense that they are realistic both in terms of timing and the nature of the work being undertaken.
b) Level of accuracy of data specified	The level of accuracy required for survey data must be clarified at the beginning of the research process, as this will influence how the data are to be collected, sample size and question construction. It may be that a general observation of a trend or incidence may be sufficient or that a much more precise figure may be required.
c) Research team well informed about the topic area	The person leading the research should be well informed on the topic area and may wish to put together a steering group to assist in shaping the research and ensuring it remains on the right track. A feasibility test or small scale pilot test may be useful in helping ensure the survey design is robust.
2. Definitions	
a) Key concepts defined	Key survey concepts should be fully defined at an early stage in the project (e.g. spelling out precisely what is meant, for example, by 'effectiveness' or 'impact'). Such definitions are important in operationalising the key concepts and ensuring consistency and continuity of measurement.
b) Concepts communicated effectively to target population	The concepts will need to be communicated to respondents in language they are familiar with. It is important to allow sufficient time for question design and testing in the survey timetable.

Criteria	Description
3. Target population	
a) Sampling unit(s) defined	The survey population needs to be clearly defined, specifically who or what will constitute the sampling unit and thus the unit of analysis (e.g. if the sampling unit is businesses this needs to be defined, for example, in terms of sites, regional offices, head office etc or the organisation as a whole).
b) Sampling methods appropriate to meet aims	Surveys requiring statistical reliability will require a random probability sampling design. The design should seek to minimise sampling error.
c) Sample size and composition sufficient to meet aims	The overall size of the sample is important and should be informed by considerations about the kinds of analyses that will be conducted and the population groups of interest (e.g. if doing analyses by type of business it may be necessary to boost certain groups expected to yield small base sizes). It may also be necessary to stratify the sample by the groups of interest (e.g. area, size of business).
d) Sampling frame(s) used ensure(s) good population coverage	The sample frame must be as complete and robust as possible and contain all information necessary to stratify the sample to ensure sampling and coverage errors are kept to a minimum.
4. Data collecting mode	
a) Mode maximises survey participation	The data collection mode(s) selected should ensure the possibility that as many businesses as possible are willing and able to participate. Using a mode that excludes or restricts particular groups' participation in the survey will introduce response bias, effecting the representativeness of the survey.
b) Maximises data quality	The pros and cons of different data collection modes (interviewer administered, self-completion, computer assisted, paper etc) should be assessed to highlight any potential problems with the quality of information being obtained. Factors that can influence quality of data obtained using different modes include: the sensitivity of the subject matter; the amount of information to be collected; the complexity of the information being sought; and the nature of information being sought (e.g. the amount of open questions, whether the question order is important). There may be some tension between this criterion and 4a) above.
c) Maximises chances of respondents being able to provide information being sought	It may be appropriate to send respondents information in advance of the interview, depending on the nature of the topic and survey mode. This is particularly relevant if the information needs to be looked up (e.g. financial records). The benefits and drawbacks of doing so need to be taken into account before a final decision is made.

Criteria	Description
5. Questionnaire design	
a) Questionnaire content established	The content and priorities of the questionnaire should be decided after reviewing the survey aims. A period of developmental work may precede the question design phase, to scope out the important issues. This may be through consultation with experts in the topic area and/or recipients of a certain product or policy. The questionnaire must be kept within an agreed time limit to ensure respondent burden is kept to a minimum.
b) Most appropriate respondent(s) identified	Depending on the nature of the survey it may be necessary to establish the person most suited to participate in it. For example, in a survey of businesses there may be one person to target or the information required may be spread across a number of individuals. Development work can be useful in identifying whether respondents have the information that is being sought and in defining who should be targeted as the 'main' respondent.
c) Questions designed that respondents understand, are willing and able to answer	The questionnaire must be designed to enable all types of respondent to easily provide the information required and ensure results are comparable (e.g. the characteristics of recipients of a particular product or scheme may differ widely and therefore the questions must make sense across the board). Some basic principles of questionnaire design include: break down complex tasks into 'bite size' pieces; use clear, simple syntax; use clearly defined terms and concepts (see 2a); request information that respondents will be able to provide; use easily accessible time scales and reference periods; route questions so respondents answer questions only relevant to their situation; and ask questions that are deemed appropriate and acceptable. Investing time in questionnaire design is vital to the success of the survey.
d) Questionnaire fully tested	The questionnaire must be subjected to rigorous testing to ensure it is fit for purpose and that measurement error is kept to a minimum. Respondents can experience problems at each of the following stages of answering a question: comprehension, retrieval of information, judgement and response ¹⁴ . When filling in a self-completion form respondents may also experience problems in navigating through the document, particularly with routing to relevant questions.
e) Pilot test conducted	With new surveys it may be necessary to conduct a pilot test to ensure all aspects of the survey design are working as effectively as planned. A pilot test will uncover problems with the process, such as unwillingness to take part, difficulty in pinpointing the correct person to take part or high item non-response at certain questions. It will also provide evidence on the length of interview (if the questionnaire is to be administered by an interviewer). The pilot may also identify problems with the proposed systems for the returning of questionnaires or editing of data, for example.

¹⁴ Collins, D (2003) 'Pretesting survey instruments: An overview of cognitive methods' *Quality of Life Research* 12:229-238.

Criteria	Description
6. Data collection	
a) Clear guidance and training for interviewers/fieldworkers provided to ensure that data are collected in a consistent way and interviewer bias minimised	Interviewers will need to be very clear about the survey's objectives and their role in the data collection process. They should be fully briefed shortly before fieldwork and provided with written documentation to refer to during it. Interviewers should have the necessary skills to encourage potential respondents to take part and reassure them that the information they give is important. There should be rigorous quality control measures in place to ensure interviewer error is minimised.
7. Data processing	
a) Coding and editing procedures documented, staff trained and quality monitored	Data cleaning and editing can be conducted in different ways, so once decisions have been made on how this will occur these need to be documented. This process must be carried out by trained staff, in a systematic way, to ensure processing error does not creep in. Quality control procedures should be in place, and the unedited data should be retained (for an agreed period).
b) Inconsistencies in the data are checked with respondents	When data appear to be inconsistent or findings are unexpected, these data will need to be investigated to uncover exactly why this may be. Ideally such inconsistencies and unexpected answers (i.e. values outside the expected normal range) should be reconciled with the respondent.
c) Missing values and outliers treated consistently	It must be clear how missing values and outliers will be treated and this should be documented.
d) Data manipulation procedures (e.g. derived variable creation) documented allowing replication	Derived variables (variables created by the analyst that involve combining information from two or more sources) should be documented to allow others to replicate their creation, and to facilitate in checking that they have been derived correctly.
8. Data analysis	
a) Errors/biases dealt with consistently	Survey bias and errors must be dealt with consistently to ensure comparability across responses is retained. Decisions need to be made about how to deal with outliers and non-response when analysing the data. Measurement error and the effect it has on the data must also be considered in interpreting findings.
b) Data analysed using appropriate statistical methods and model assumptions fully documented	Where appropriate, the resulting data should be comparable with statistics from other surveys within the socio-economic domain. This point should also be considered when thinking about mode of data collection, as mode can affect comparability of survey findings ¹⁵ .

¹⁵ de Leeuw E.D. (2005) To Mix or Not to Mix Data Collection Modes in Surveys. *Journal of Official Statistics*, 21 (2): 233-255.

Criteria	Description
9. Outputs and dissemination	
a) Reports are clear, well-written, timely and accessible	The report should clearly address the research objectives. All outputs should be accessible in terms of being easy to locate, read, interpret and understand. The report should be produced within a reasonable time frame following the fieldwork period and delivered on a date agreed well in advance.
10. Management issues	
a) Successful commissioning process	The commissioning process should aim to follow the Social Research Association guidelines (pages 6 to 8) ¹⁶ wherever possible. Those who are managing the commissioning process internally must be able to reflect both policy and research expertise. The Invitation to Tender (ITT) is required to set out clear aims for the research and requirements for outputs. The tendering process should also be open to a wide range of contractors.
b) Effective dialogue with research contractor established	It must be clear who the project manager will be and what their responsibilities will entail – both on the client and contractor sides. As stated earlier, it is important that the contractor understands exactly what data are required to address the key research objectives. How the findings will be used by policy customers should also be communicated. The attendance of research commissioners/ project managers at interviewer debriefings and/or listening in on interviews is extremely useful in ensuring quality control and assessing how successful the survey design is.
c) Quality control monitored	There must be verification that the research instrument is 'fit for purpose' based on findings from piloting and early analyses of data collected.
d) Timetable adhered to	The timetable should be monitored to ensure that the data are produced on time, and in a coherent and appropriate format, so they can be of maximum value to the policy customers.
e) 'Value for money' of survey assessed	Once the project is completed a decision should be made regarding whether it provided 'value for money' and thus if it were to be repeated how improvements could be made. This knowledge should be documented so that it can then feed into future ITTs to help produce high quality and cost-effective work.

¹⁶ The SRA guidelines can be found at http://www.the-sra.org.uk/commissioning_sr.htm

2.4.2 Specific criteria evaluating the measurement of economic impact

Criteria	Description
11. Evaluating economic impact	
a) Reliable self-reports of economic change achieved	Respondents must be willing and able to give robust, accurate details of the way in which particular policies, initiatives or schemes affect their company. The questions must be designed so that they are easy to understand and can be answered using information that one might reasonably expect the respondent to have access to.
b) Respondents able to construct the counterfactual (i.e. change without the policy/initiative as an estimate of total change)	In addition to giving full information regarding the actual change the policy or initiative had on the company, respondents must be fully equipped to be able to consider the counterfactual : what would have happened had they not participated in or been affected by the programme, scheme or policy? Respondents can be asked to construct the counterfactual when they have not received the treatment (for example, their grant application was not successful). The counterfactual in this case is what they think would have happened had they received the treatment. In both cases respondents are asked to quantify the impact: to say by how much things would have been different. There should be internal consistency in the story being told, i.e. data on economic change should be consistent with the respondent's overall assessment of the counterfactual.
c) Low proportions of item missing at economic impact questions	The questions on economic impact should yield full, high quality data with few missing responses.

2.5 Summary table

As stated earlier, this report does not contain details of how the three surveys scored against each of our evaluative criteria. These were provided to BERR when this report was initially produced but have been removed for publication. Our assessment of whether each survey fulfilled our evaluative criteria was presented in a table format with each row relating to a specific criterion and each column containing our assessment for an individual survey.

A tick (✓) indicated that the survey met the criterion, a (♦) that it fulfilled it to an extent and a (✗) that the survey fell short of the criterion. When there was insufficient evidence available to us to be able to evaluate a particular criterion a dash was shown (-). The table was followed by a written explanation of the rationale for the assessment of each of the criterion for each of the three surveys being considered. An example of the table is shown below.

Table 2-1 Example of summary table – whether the criteria were fulfilled by three surveys

General criteria	Survey 1	Survey 2	Survey 3
1. Research aims			
a) Measurement objectives clearly set out	✓	-	♦
b) Level of accuracy of data specified	♦	✗	✓
c) Research team well informed about the topic area	✓	✓	♦

2.6 Overview of key principles that emerged from review

Although findings for each of the three surveys are not presented here, several key principles that came out of the evaluation are discussed below. These focus on three specific best practice criteria: data collection mode; questionnaire design; and evaluating economic impact and address the specific research questions that were originally posed by BERR.

2.6.1 Data collecting mode

The survey mode has to be suitable for the objectives of the study

- The evidence reviewed suggests telephone interviewing to be a mode well suited to business surveys.
- Each time mode is re-visited telephone is the end result. A telephone interview is felt to be less intrusive and less time consuming for business respondents than a face-to-face interview.
- Response rates to a telephone survey are likely to be significantly higher than for a self-completion survey.

Care needs to be taken to ensure that the ‘best’ respondent is interviewed

- If using CATI, it may be necessary to build in a screening exercise to establish the right respondent(s).
- Questions seeking detailed information about finances that are asked over the telephone without any prior warning may encourage respondents to guess the answer rather than providing accurate information.

- A well designed letter, sent in advance of the interviewer making contact, can be used to:
 - encourage participation; and
 - alert respondents to the types of information that will be asked for/questions to be asked.

Such a letter can act as an incentive or a deterrent to participation depending on how accessible the information is e.g. whether it is something that the respondent can easily find and willingly divulge. This is an area requiring further exploration.

The selected respondent may not have/know all of the information being sought

- Information may be held by more than one person within a company.
- Interviewer training could help interviewers to target the most appropriate individual. Real-life scenarios based on case studies could be useful here.
- It may be necessary to make appointments with a number of different people in the organisation to obtain all required information. There is a potential trade-off here between maximising survey response as a whole and to individual questions.

2.6.2 Questionnaire design

Respondents need to understand the question (content and terminology)

- Exploratory interviews can help scope the content of a questionnaire and identify appropriate terminology.
- Cognitive testing of questions can help iron out problems with comprehension and identify questions that are difficult or complex to answer. This can assist in breaking down questions into more manageable tasks, for example, or in determining the appropriate reference period.

Respondents need to have the necessary information to answer the question

- The developmental stage is vitally important and should establish:
 - the type of information respondents are likely to have at their disposal;
 - their willingness to divulge it; and
 - their ability to make meaningful estimates about economic impact or change.

This information should shape what information is collected, to what level of detail and in what way.

Questions may relate to past performance that is not easy to recall

- It can be difficult to recall details, or make informed estimates, about aspects of past performance.
- Respondents' ability to recall accurate details must be fully tested.
- Alternative methods of obtaining information may be necessary such as:
 - formulating a different set of questions; or
 - using alternative sources of information.

Respondents need to have the right encouragement to provide an accurate response or even to participate

- Question ordering and phrasing plays a role in the accuracy of answers.

- Asking for factual information leading up to an estimate gives the respondent less latitude to inflate the estimate.
- Conversely, if respondents are asked to give an estimate out of the blue and can see that it is in their interest to inflate the answer, they are more likely to do so.
- A higher refusal rate is likely among non-beneficiaries so the sampling strategy will need to take this into account.

Questions need to be carefully framed in terms of time and nature of organisation

- Question formulation must be given careful consideration to enable meaningful comparison.
- Long, complex questions are likely to be counter-productive, encouraging the respondent to make up answers rather than give them careful thought. Such questions should, where possible, be broken down into “bite size chunks”.
- “Reference frames” and units of observation should be clearly defined to ensure respondents use them consistently. Moreover, where possible, respondents should be asked to provide information in the format they find easiest (i.e. allow respondents to self-define last full business financial year).

Responses need to be comparable across the full range of interviewees

- Good questionnaire design is imperative to ensure terminology is meaningful to all respondent groups.
- CATI can help with this as questions and response options can be tailored to respondent circumstances.

2.6.3 Evaluating economic impact

Are we able to rely on what "beneficiaries" say about the intervention?

- This depends on what is being asked. Views and information must be easily accessible. Respondents need to:
 - know or be able to find out the information being sought (e.g. turnover or exports);
 - be given the opportunity to obtain the relevant figures after the interview.
- There were mixed views about the merits of asking potential respondents in advance to have economic data to hand at the time of interview. Again, this depends on how easily available the information is. This is an area that possibly warrants further testing.

What is the ability of beneficiaries to provide an accurate description of the economic impact of the support received?

- There is a general awareness among respondents about whether or not there has been an effect on business performance (turnover, employment etc) as a result of participation in the program/ receipt of a grant or advice.
- It is often difficult for respondents to **quantify** information on economic change during the interview.
- Sometimes further relevant information needs to be obtained during the interview process to enable reliable estimates to be made at the data analysis stage.

What is the best way of gaining this information from them?

- Research design phase is crucial.
- This may require building in other research components to complement the main survey such as:
 - having a control group to help in measuring the counterfactual; and
 - conducting case study interviews for evidence purposes.

How can we best use the survey information to inform an assessment of the policy that generates the support?

- Effective questionnaire design can facilitate the verification of answers (i.e. asking respondents to confirm amounts), which in turn will help to produce more reliable data used in calculations and estimates at the analysis stage.
- Additional sources of information can provide further supportive evidence and be used as a measure of validity, for example control groups, case studies, in-house data sources etc.

The respondent may need support to construct the counterfactual relevant to the impact question asked

- These **must** be considered estimates only.
- Estimates must be informed i.e. based on evidence or experience rather than grasped out of the air.
- Questions should be ordered logically to enable the respondent to construct the estimate of the counterfactual with some degree of accuracy.

Difficulty putting figures on perceived benefits

- Cross referencing and enhancing estimates with data from other sources (e.g. “control group”):
 - assists in establishing validity;
 - supplements the survey data;
 - enables some form of reliable quantification of the counterfactual.

3 COGNITIVE TESTING OF SURVEY QUESTIONS (STAGE 2)

Following the review, an interim report was delivered to the Department summarising findings from stage one and proposing a number of suggestions for the next stage of this project - two rounds of cognitive testing of questions designed to measure the economic impact of BERR interventions.

Specifically, stage one highlighted a number of issues in relation to the Business Support Cross Product Monitoring Survey (Beneficiaries) that we proposed to explore further in the cognitive testing phase. These issues included:

- exploring the difficulties respondents face in providing detailed financial and business information;
- identifying potential sources of error in the information provided, and the factors that contribute to such errors; and
- mapping the factors affecting respondents' willingness to take part in the survey.

We proposed conducting two rounds of cognitive testing; round one would test the current Beneficiaries Survey's economic impact questions, and then, based on findings from these initial interviews, round two would test a revised set of questions.

This chapter summarises the findings from the two rounds of cognitive testing conducted in February and April 2007 respectively. Separate reports detailing the findings from each of these two rounds of cognitive testing are available (see section 1.2.2, footnotes 5 and 6 for references).

Cognitive interviewing methods, which are derived from cognitive psychology, enable researchers to examine (in greater detail) the question-and-answer process, helping to identify problems with questions and possible solutions. Cognitive interviewing techniques focus on four main processes:

- how respondents understand and interpret questions;
- how respondents recall the information required to answer questions;
- the judgements they make as to what information to use when formulating their answers; and,
- how to respond to the questions¹⁷.

The two most frequently used cognitive interviewing techniques are 'think aloud' and probing.¹⁸ In this study, a mixture of think aloud and probing techniques were used. In the think aloud technique, respondents were asked to say out loud what they are thinking as they go about the task of providing an answer to the survey question. For example, respondents would be encouraged to articulate what they think a particular question means, what information they are drawing on to formulate their answer, what decisions they make about what they are being asked to provide or what information is required to answer it and how they provide their (final) answer.

In the probing technique the interviewer will ask questions or 'probes' that are partly pre-scripted, which elicit information on the question-and-answer process, after each question or at

¹⁷ Tourangeau R. (1984) "Cognitive sciences and survey methods." In T Jabine, M Staf, J Tanur, R Tourangeau (eds). *Cognitive Aspects of Survey Methodology: Building a bridge between the disciplines*. Washington DC: National Academy Press: 73-100.

¹⁸ Willis G.B. (2005) *Cognitive Interviewing: a tool for improving questionnaire design*. Thousand Oaks, CA: Sage.

the end of a series of questions. For this study a combination of think aloud and probing was used, with more detailed scripted probes being asked after each question.

3.1 Testing the existing ‘beneficiaries’ questions – round one

Cognitive respondents, in the first round, were asked the questions currently asked in the Business Support Cross Product Monitoring Survey on economic impact. Respondents were asked to think aloud as they attempted to answer each survey question. In addition after each question was asked, the interviewer asked a number of specific probes to ascertain what respondents’ understood particular aspects of the question to mean, and how they went about their (final) answer to the question. All interviews were recorded with respondent consent.

In this first round 14 interviews were conducted with a range of different types of respondents. Respondents were selected purposively, with quotas being set to ensure as broad a range of respondents were included as possible. These quotas were as follows:

- the product received – the Beneficiaries Survey is concerned with six products, so at least one recipient of each was interviewed;
- size of business - small, medium or large; and
- number of sites - single or multi-site.

The members of the research team and the field interviewers, all of whom were trained in cognitive methods, made detailed notes on their cognitive interviews, with reference to the recording of the interview. These notes, recordings of the interviews and the completed test questionnaires were reviewed as part of the analysis process.

Notes were analysed using a content analysis approach based on Framework, an analytic tool developed by the Qualitative Research Unit at NatCen. A matrix was set up, with each column representing a test question and each row an individual respondent. More details on the cognitive testing methodology employed, including the probes used, are contained in McGee et al (2009)⁵.

Findings from the cognitive testing showed that, although respondents were generally able to answer questions on the financial profile of their business, specific questions on the economic impact of the BERR intervention were more difficult. Questions asking about the counterfactual (what would have happened had the business not received the intervention) were particularly difficult to answer. In particular the cognitive interview evidence indicated that the quality of the data collected at these questions was highly questionable. It was clear that in some cases it was too soon to tell what impact, if any, the intervention had had on the business. It was also apparent that it could be difficult for respondents to disentangle the impact the intervention had had from other factors that had affected its performance. When respondents felt able and willing to quantify these impacts these were more guesstimates than estimates. The requirement to provide an actual figure rather than an indication of the ‘direction’ of impact compounded this problem. Moreover the response task itself was seen as being complex and it was suggested (by respondents) that questions be broken down into smaller, more manageable ‘chunks’. A report containing details of the findings of this stage of testing is available, see section 1.2.2, footnote 5, for details.

3.2 Revising the ‘beneficiaries’ questions

Following the first round of cognitive testing, recommendations for revisions to the questions were made. Among the many recommendations, it was proposed that more qualitative questions were added, to give a general feel of the impact the intervention had had, rather than

always asking respondents to supply a figure. Questions were rephrased to ensure respondents fully understood them and some of the more detailed financial information removed (i.e. respondents were asked to give a band rather than a specific figure). These revised questions were subjected to further cognitive testing, and are included in the stage one testing report (refer to section 1.2.2, footnote 5 for the full reference to the report).

3.3 Testing the new questions – round two

The second round involved cognitively testing the re-designed questions on economic impact. The cognitive interviews were conducted in the same way as in round one, using a mixture of think aloud and retrospective probing to explore respondents' thought processes. A total of 17 interviews, covering a range of different types of respondent, were conducted.

Findings from the second round of testing showed a similar pattern to that found at round 1. Respondents were generally able to answer questions on the financial profile of their business and despite attempts to make the more specific questions on economic impact clearer and easier to answer these were still found to be difficult. Some of the changes made following round 1 were found to have been successful, for example when respondents were asked to give a more general idea or direction of the impact of the intervention rather than a specific figure. Questions on non-financial benefits the business had experienced as a result of the intervention were found to be particularly successful. A report on the findings of stage two cognitive testing is available, see section 1.2.2, footnote 6, for details.

3.4 Final questions

Following the second round of cognitive testing the questions were again revised and a suggested final set were to the Department. Section 4.1 presents a summary of our final recommendations, incorporating our suggested wording changes for the survey questions tested to measure economic impact.

4 FINAL RECOMMENDATIONS (STAGE 3)

This chapter contains our recommendations on the wording of survey questions to measure economic impact, the mode of data collection and the unit of observation (section 4.1). It also contains suggestions for further research, particularly exploring alternatives to self-reports as a means of measuring the counterfactual (section 4.2).

4.1 Recommendations for survey implementation

4.1.1 A mandatory survey

We recommend the Department consider making participating in the ‘evaluative’ survey a condition of applying for an intervention. This, in our view would boost response to the survey, building on the social exchange theory. This theory asserts that individuals’ actions are motivated by the return these actions are expected to bring from others¹⁹. This theory can be applied to survey response. If respondents see a return to themselves (i.e. the possibility of their application being successful) they will be more motivated to take part in a survey. In addition, for those unsuccessful applicants it will make it easier, potentially, for interviewers to explain why the applicant has been contacted.

4.1.2 Interview mode

In terms of conducting surveys with businesses, evidence from this study suggests that telephone (and specifically Computer Assisted Telephone Interviewing or CATI) is a good mode for this population group. It can collect data of a relatively high quality while achieving reasonable response rates. Telephone surveys are seen as being less intrusive by businesses in comparison to face-to-face surveys (a view shared by both the survey contractors and businesses we interviewed in stage one of this project) and they are less costly to administer. However whilst telephone methods might be an appropriate mode currently available, it is worth in our view, the Department considering the use of other modes, particularly as part of a mixed method approach, in the longer term to help maintain response rates and improve data quality. This proposal is discussed further in section 4.2.3.

4.1.3 Questionnaire length

Evidence from this study, particularly the cognitive interviews, showed that questionnaires must be kept short, to ensure respondents take part but also to yield more accurate data. Respondents will suffer from fatigue and burden if the interview is overlong and they are less likely to take part in a future survey.

4.1.4 Question wording

The recommendations in this section relate to the current approach - that is questions about economic impact and measuring the counterfactual, which constitute part of a wider CATI questionnaire asked as part of a large cross-sectional survey of recipients of a BERR intervention. These are summarised below. Further details on findings of the cognitive testing, which informed these recommendations, along with more detailed recommendations relating to

¹⁹ Dillman, D.A (2000) *Mail and Internet Surveys: The Tailored Design Method*. New York: Wiley.

each test question, are contained in the round two cognitive testing report (refer to section 1.2.2, footnote 6 for the full reference to this report).

- Add a set of new questions, asked of multi-site businesses seeking information on the number of workplaces and employees, at the outset of the questionnaire to establish the link between workplace and (entire) business. This information can then be used to aggregate or scale the answers so that they are comparable across the whole sample.
- Add questions to determine whether respondents are thinking of the workplace or the business as a whole when providing financial information.
- Customise the wording of question throughout the questionnaire to refer to business or workplace, depending on the respondent's preference.
- Consider sending out show cards (cards containing pre-specified answer options for particular questions) in advance of the interview. Cognitive respondents were found to struggle to retain all the answer options in their head when they were read aloud. This was found to be particularly difficult when formulating an answer and fitting it into the one of the options provided was not straightforward. A visual stimulus would be advantageous in assisting with this process, by minimising the response burden of having to remember the answer options.
- Specify the timeframe to be considered as part of the question wording, where applicable e.g. 'last complete financial year'.
- Change the terminology, where appropriate, so that 'gains' is replaced with 'returns'. We anticipate that this will improve the question as currently it may be biased towards positive responses.

Appendix C contains our recommendations for the wording of questions seeking information on economic change and the counterfactual, to be included in the Beneficiaries survey.

Further validation of proposed new questions

A further recommendation is that we feel there would be value in the Department looking into further validation of the revised questions. We have conducted two rounds of cognitive testing and made revisions in light of the findings. However, the final recommended questions have not been subjected to further cognitive testing or to field-testing. While we feel the alterations we have made are likely to constitute improvements it would be beneficial to further test these questions to find out whether this hypothesis is true. Cognitive testing would be of value in this regard as would some form of split panel experiment, which would enable differences in data quality obtained to be quantified.

4.1.5 Mixture of measures

We recommend that the current questions on economic impact include a mixture of both quantitative and qualitative 'measures' (objective and subjective reports) as the existing literature demonstrates that - and our findings from the cognitive testing supports - respondents find it difficult to quantify the level of impact an intervention has had. Qualitative accounts of what has taken place would also be helpful in fully understanding the effect of the intervention. We suggest that surveys such as Beneficiaries include both objective and subjective measures of impact.

4.1.6 Unit of observation

Both rounds of cognitive testing showed that respondents thought about different 'units' when answering the test questions. In general, when respondents worked at workplaces or establishments that were part of larger businesses, they would answer the general questions about the business's finances (e.g. annual turnover and staff costs) thinking about the business

as a whole and the more specific questions regarding the intervention thinking only about their workplace (the place where they worked). Therefore the survey questions must be in asked in such a way that it is possible, at the analysis stage, to standardise responses to a common unit of observation (e.g. a workplace or business). The new suggested questions include a strategy for dealing with this issue based on the current questions used as part of the Workplace Employee Relations Survey (WERS)²⁰.

4.1.7 Companies that fail

It is also important not to forget about businesses that fail following the receipt of an intervention. These businesses must be included in a study of economic impact as the information they give is still very important, without which the survey estimates would be biased.

4.2 Suggestions for further research

The early stages of this research project identified a number of methodological issues that fell outside the scope of this study but which, in our view, require further consideration by the Department. In this section we set out these issues and our recommendations for further research.

4.2.1 Reviewing existing data

Inconsistencies

We recommend that further secondary analysis of the Beneficiaries Survey data should be undertaken to explore the nature of inconsistencies between financial data and self-assessed economic impact. For example, such analyses could investigate whether certain kinds of businesses, such as those that are relatively new or in particular sectors, are more likely to provide inconsistent data. Such work falls outside the scope of this project, but is felt to be potentially useful in informing the final data collection and analysis strategy employed by BERR.

Timing of the survey

Earlier stages of this project flagged up the issue of the timing of the survey (i.e. how long after the intervention had been received should a firm be contacted?). As some surveys cover questions on (a) the company's rationale for application and (b) the economic impact of the intervention there is clearly a balance to be struck in terms of deciding when the survey should be conducted (i.e. how soon following participation in the intervention). In order to fully assess the best time to ask these questions (particularly those concerned with economic impact) we recommend conducting secondary analysis of existing data, following this up with an experiment to compare the sorts of information gathered and looking at different time periods (3 months, 6 months or 1 year following the end of receipt of intervention, for example). If the Department were interested in taking this option forward we would be happy to outline in more detail the approach we would take.

²⁰ Forth, J. and McNabb, R. (2007) 'WERS 2004 Information and Advice Service Technical Paper No. 1 Innovations' in 'WERS 2004: The Collection of Objective Data on Workplace Performance'.
<http://www.wers2004.info/pdf/WIAS%20Technical%20Paper%20No%201%20-%20Objective%20data%20on%20workplace%20performance.pdf>

4.2.2 Sending advance information to potential respondents

The Beneficiaries Survey wave 5 report highlighted a gap in our knowledge about the impact on response rates and data quality of sending advance information to respondents regarding the kinds of data being sought by the survey, and recommended that further research is conducted. The findings of the work undertaken as part of the wave 5 Beneficiaries Survey were inconclusive. We suggest that there would be value in the Department funding further research, as potentially this approach could improve data quality. We could sketch out what this work should entail, if the Department were interested in exploring it further.

4.2.3 Mixed mode or mixed methods design

An earlier wave of the Beneficiaries Survey took the form of a self-completion questionnaire, to be filled in on the Web. This resulted in poor response rates overall and respondents often gave up half way through completing the questionnaire. We recommend that the Department consider a **mixed mode approach**, offering respondents a choice in how they participate in the survey; specifically whether to take part in a telephone interview or complete a web-based questionnaire. Adopting such a strategy might boost (or help prop up) response rates. In deciding whether to adopt such an approach evidence would need to be obtained about whether it did indeed boost response rates (sufficiently) and whether the quality of the data obtained from the web survey would be of a sufficiently high enough quality. In practice, this would require some form of field experiment. Again, if the Department were interested in pursuing this option we would be happy to provide a more detailed outline of what this work might involve.

A second option is to adopt a **mixed methods approach**, which would involve providing respondents with a self-completion form seeking information on general business finances (e.g. annual turnover and staff costs) that they would be asked to complete prior to participating in the telephone interview, which would collect more complex information on the intervention and its impact. The advantage of this approach would be that respondents could consult (more easily) with others within the organisation, if needed, to obtain the required general business information. Moreover the removal of this information from the main telephone interview would reduce its length.

4.2.4 Alternatives to self-assessment²¹

Problems with retrospective assessment of impact

Respondents face a number of difficulties when trying to assess whether and, if so, how their organisation's economic circumstances might have been different if they had (not) participated in the scheme. These include problems of recall. Research in related areas, such as labour market programmes, suggests that participants often recall circumstances prior to participation and compare them to circumstances post-participation then reflect on the extent to which the before-after difference in economic circumstances might be attributable to participation. It is inherently difficult for a respondent to estimate just how much of a difference the programme has, in fact, made. (More broadly, the psychological experimental literature suggests respondents often find it difficult to identify the causes of particular outcomes). It may be, for example, that the respondent has under- or over-estimated the effect of trends in market demand for the good or service being produced. It is therefore common to supplement retrospective impact information with analyses of what happened over the same period to a 'similar' group of organisations that did not participate in the programme. One can then

²¹ We are grateful to Alex Bryson at the Policy Studies Institute and Susan Purdon at NatCen for their advice and input into this section.

compare the difference in outcomes for non-participants to the difference in outcomes for participants (a difference-in-differences approach). In principle, it is possible to adopt this approach with both subjective and objective measures of performance. For example, if we know that participation in a BERR programme occurred in 2006 and we are able to ask participants about circumstances in 2005 and 2007, we can do the same for non-participants and, controlling for observable differences between the two groups, seek to attribute any remaining differences in outcomes between the two groups to participation. Of course, this approach is not without problems too. For instance, it may be that the two groups differ systematically on criteria that are not observable to the analyst yet affects economic outcomes. If this is so, then differences attributed to participation are, in fact, driven by other factors correlated with participation.

The literature on labour market programme evaluation suggests that retrospective impact questions bear little relationship to plausible econometric impact assessments. However, they do tend to be associated with crude proxies for impacts such as before-after comparisons. In some instances, this results in upwardly biased estimates of programme effects, an upward bias that can be larger when a programme is perceived to be particularly expensive or resource-intensive (Smith, Whalley and Wilcox, 2006)²². As Smith et al. (op cit.) note, the upward bias in retrospective impact estimates has been observed in other settings such as classroom performance.

It is possible that some of the drawbacks in retrospective impact assessment can be overcome, to some degree, by surveys that measure expectations and evaluations in different ways. For instance, there is increasing interest in Manski's²³ (2004) methods for measuring subjective probabilities. However, Smith et al. (op cit) take a more pessimistic stance, warning of the dangers of devoting resources to programmes that appear to 'work' on the basis of subjective retrospective assessments but would not be deemed successful if evaluated using experimental or quasi-experimental methods.

It should also be noted that many of BERR's evaluations draw on retrospective reports specifically from the recipients of particular interventions (products, grants and schemes). These recipients tend to be members of the business community and therefore may hold a desire to positively reflect a particular intervention in order to reinforce it (i.e. they have their own personal interest in taking part in a survey and this may, in turn, affect answers to particular questions). This supports the argument that we need to look for more objective ways of looking at the economic impact of BERR policies and practices, administrative data being one such data source.

In summary, we feel that there is sufficient evidence to indicate that sole reliance on data obtained from subjective self-assessments, currently collected in many BERR surveys, can hinder the Department's efforts to assess the economic impacts of its policies and programmes. We recommend the Department consider the following three proposals.

1. Investigate the practicality of alternative retrospective assessments along the lines proposed by Manski (2004), described above.
2. Consider the possibility of before-after sampling using accounting information on the performance of participants pre- and post-participation. This would provide some objective measure of what 'really' happened to the firm, which at the very least would provide useful validation of the success of the current self-assessment methodology.
3. Seriously consider alternative strategies for identifying the causal effect of these schemes, including before-after surveys with 'like' non-participants.

²² Smith J, Whalley A and Wilcox N (2006) 'Are Program Participants Good Evaluators?' Web working paper. http://faculty.ucmerced.edu/awhalley/web/smithwhalleywilcox_082006.pdf

²³ Manski, C. (2004) 'Measuring Expectations', *Econometrica*, 72, 5, 1329-1376

Clearly the costs and benefits of spending more money and effort on programme evaluation need to be considered. This will depend, to some degree, on the extent to which one anticipates that there are likely to be substantial impacts to be identified. However we believe the Department should be looking to a strategy that places greater emphasis on utilising the longitudinal administrative data they have on participant and 'like' non-participant firms, which can be linked to firm performance data. This, linked with survey data that provide information about process, for example how things are or are not bedding in, and in furthering understanding generally about how firms orient themselves towards government support, would provide a richer and more accurate picture of the impact of BERR policies on businesses.

Longitudinal design

Taking the issue of timing further still we recommend the Department consider the possibility of using a longitudinal rather than a cross-sectional approach. This would help address the problem of simply having a snapshot of the business following the intervention and instead gain a more accurate picture over a period of time. It has been shown that situations can change greatly over a relatively short period of time and we are not currently capturing this. Wide variability exists within the respondent group and further follow up interviews would help better explore this variability. A longitudinal design would mean that respondents could be asked different types of question each time and when they are most relevant, for example: questions about delivery of interventions could be asked at the first wave and questions about economic impact at a much later wave, perhaps five years into the future. This type of approach would also help keep the overall questionnaire length short (see section 4.1.3).

Appropriateness of financial measures

A further issue that requires consideration is the appropriateness of the financial measures of impact, which are central to the current impact assessment strategy. If the Department were willing and able to utilise longitudinal administrative data on firms, linking this to programme participation, then it would be possible to supplement this approach with analyses of firm survival and growth. These are two alternative measures of performance, both highly correlated with profitability, which are commonly investigated in the industrial and labour economics literature. We would be willing to discuss these ideas further with the Department, if of interest.

4.2.5 Measuring the counterfactual

As the literature shows, and our evidence supports, the counterfactual is extremely difficult and complex to measure. We discuss one aspect of this difficulty at the start of section 4.2.4 above. More broadly, the problem in identifying the impact of a BERR programme arises from the fact that participation in programmes is not random. Businesses will only take up interventions at 'non-random' times in their lives (e.g. when they are performing very badly or very well) and thus it is difficult to compare these businesses with others that have not received the intervention, unless one is able to adequately control for differences between participants and non-participants that might also affect economic outcomes.

'Treated' vs 'control' groups

It is important to firstly establish exactly who has been 'treated' (i.e. received the intervention) and who forms part of the 'control' group.

Identifying participants can be problematic if one has to rely on organisations identifying themselves as participants. Often firms confuse programmes, or simply cannot recall whether they have been on a programme, especially if the scheme is short or of seemingly little

significance. Administrative data held at BERR to identify participants could therefore assist in correctly identifying who has participated.

The problem of identifying 'like' non-participants is well-documented, particularly in the labour market evaluation literature. The key finding in this literature is that very good quality data are required to 'match' non-participants to participants as a credible counterfactual. Even if this is achieved the analyst must consider what being in the 'counterfactual' group actually means. It is not always synonymous with 'no treatment' at all. Companies may obtain 'like' advice or assistance from other sources. They may also be affected by not participating in the programme ('spillover' effects). This may occur when a programme has a substantial effect on a group of companies in a particular sector or region of the country, or even nationally where a programme is particularly large. It may be, for instance, that not receiving a grant or assistance may increase the probability of closure if grant recipients survive at the expense of competing firms.

Data implications

There are data sources available that might form the basis for a quasi-experimental analysis of BERR programme effects. The Inter-Departmental Business Register²⁴ (IDBR) offers a sampling frame that is the universe of all firms in Britain registered for VAT or PAYE purposes. It is possible to use unique identifiers in this register to link businesses to other data sets, including programme evaluation databases, and thus this could form the basis for studies comparing participants with non-participants. These studies could use existing data sources, such as the Annual Business Inquiry²⁵ as the basis for economic data. Alternatively, the IDBR could be used to sample organisations for a survey-based evaluation. BERR may therefore wish to consider using these data in one of two ways.

1. Data for businesses within the sample (i.e. that received the intervention) could be taken and compared with answers to survey questions; this approach could then be used to assess the success of the survey measures.
2. Data for potentially similar businesses to those in the sample could be taken and used to form a 'control' group to compare with similar administrative data for businesses within the sample (i.e. that received the intervention).

Intervention application data

We recommend the Department explore the option of harnessing the original application data for a particular business. When the decision was made to award the intervention the 'gatekeeper' must have used some kind of scoring system to determine or assess eligibility (e.g. profiling, score assessment, selection process) and made some subjective assumptions regarding how well a company will perform having received the intervention. This information would thus be useful to compare with the survey outcomes.

Further qualitative work

We recommend the Department look into commissioning more qualitative work in this area. For example depth interviews could be conducted with respondents to validate their answers, exploring their circumstances in more depth to understand whether accurate answers had been given to the survey they took part in. More generally it would be beneficial to collect more qualitative data on respondents' motivations for applying for the intervention and what they expect to get out of it long term (employment growth, survival etc). These findings could be compared with the survey findings, adding to the explanatory power of the study.

²⁴ <http://www.statistics.gov.uk/idbr/idbr.asp>

²⁵ <http://www.statistics.gov.uk/abi/>

Random assignment

Finally, in this report we have said little or nothing about the random allocation of firms to BERR programmes. This is in spite of the fact that random assignment is the 'gold standard' in terms of identifying causal impacts of programme participation. The reason for this is that random assignment, if undertaken properly, ensures that participation in the programme is not associated with other factors about the participant firm which are unobservable to the evaluator but may be correlated both with participation and the outcome of interest. That is to say, random assignment ensures that impact estimates are not confounded by biases associated with unobservable differences between participants and non-participants. The reason we have not discussed this methodology is that we assume that BERR is unlikely to want to adopt this approach in delivering or evaluating its services. However, we would be very happy to discuss this further with the Department. (It is worth noting that random assignment has recently been adopted by DWP as the preferred method in evaluating labour market programmes).

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APPENDIX A BUSINESS SUPPORT CROSS PRODUCT MONITORING SURVEY - A SUMMARY

This annex contains a summary of the Business Support Cross Monitoring Survey (known as “Beneficiaries”) evaluated as part of stage one of this research.

Background

A survey of businesses that uses various **BERR Support Products**.

Six support products were evaluated at the 5th wave.

- 1. Knowledge Transfer Partnerships (KTP)** – This product aims to increase knowledge transfer into UK businesses from further/higher education institutions and research organisations (the 'knowledge base') in the UK. The knowledge transfer is achieved through a project undertaken by a good quality, recently qualified, individual working in the company and supervised by staff from the knowledge base and company partners. Projects are part funded by government and the participating company.
- 2. The Grant for Investigating an Innovative Idea (GIII)** – This scheme is aimed at businesses or individuals who have an idea to develop an innovative product, process or service, but are not sure whether they are ready to take it forward successfully. Those that submit a successful application are awarded a grant, which reimburses some of the costs of a project mentor and/or consultant.
- 3. Grant for Research and Development (GRD)** – This product replaced SMART and is designed to provide grants towards the research and development costs of technologically innovative products and processes. Four types of products are supported: micro projects, research projects, development projects and exceptional projects.
- 4. Support to Implement Best Business Practice (SIBBP)** – There are a number of stages to this scheme. Firstly the Business Performance Diagnostic or Best Practice Diagnostic, delivered through Business Links, aims to help businesses identify and implement best practice techniques relevant to them. The next stages are the formulation of a strategic action plan and potentially the involvement of a part-funded consultant in helping to implement it.
- 5. Small Firms Loan Guarantee (SFLG)** – This is a joint venture between the Department for Business, Enterprise & Regulatory Reform and a number of approved lenders. The scheme provides a guarantee to encourage banks and other financial institutions to lend money when small firms are unable to raise conventional finance for viable projects because of a lack of security or established track record.
- 6. Selective Finance for Investment in England (SFIE)** – This scheme is designed for businesses that are looking at the possibility of investing in an Assisted Area but need financial help to go ahead. This scheme provides a grant towards a project’s capital cost. Support is available for businesses investing in manufacturing, as well as businesses in service industries that supply a national rather than local market.

The requirement to evaluate these products follows the **Business Support Transformation** that took place in 2002.

Survey aims

Research based aims

- To provide brief evaluative data for these six products (providing them with a set of 'scores').
- Feed into full impact evaluations in future.

Specific goals are to provide:

- evidence about the **expected** impact and effectiveness of the products;
- measures of **satisfaction** with customer delivery;
- data on the **profiles** of business participants;
- information about the business context and goals which prompted the users to take up the support product;
- details about alternative support sources, information sources and marketing channels used.

Methodological aims

- Examine this approach and see what works and what does not for future use.
- Review changes to the approach while maintaining consistency and comparability of data.

Methodology

- Fifth wave was conducted between September and December 2005.
- The work was contracted to Ipsos MORI.
- Interviews conducted using CATI - a total of 1,774 interviews were completed.
- Sample was randomly selected and had to be supplemented due to low response.
- Response varied across the six products ranging between 45-73 per cent.
- Each of the six products had been monitored at a previous wave and so based on this a **single questionnaire** was designed to cover all products.
- A pilot test of four of the six products was conducted prior to the main stage.

Report

- The published report provides data for successful and unsuccessful applicants to each product. There is a very low base size for unsuccessful applicants.
- Analyses are conducted for each of the six products and trends are given when data have been collected at previous waves.

Survey topics

There were 10 main survey topics.

1. Participation in the product

- Frequency of participation and application (decisions made regarding application, amount of loan etc).

2. Profile of participants

- Age and size of business.
- Industry sector and company status (independent, charity etc).
- Financial profile.
- Profile of directors (whether has university degree, male/female directors).
- Growth trajectory.

3. Business context 1: Goals and motivations for participation

- Reasons for participation in scheme.
- Growth objectives and history.
- Business plans.

4. Business context 2: Alternatives available to business participants

- Perceived alternative sources of support and funding.

5. Additionality

Whether the product enabled the achievement of better results than if it had not been used or whether they would have been achieved but the product made this take place more quickly.

6. Quality and satisfaction ratings

- Overall satisfaction with the product.
- How it compared to their expectations.
- Overall quality of the product and whether would recommend it.
- Suggested improvements.

7. Impact and effectiveness

Whether they have benefited or expect to benefit from:

- the innovation (e.g. management practices and skills have improved);
- better production and competitiveness (e.g. improved exchange with key customers);
and
- improved business performance (e.g. reduced costs or improved in sales).

These measures were given a score and an overall 'scorecard' created.

8. Marketing information channels

- How heard about the scheme (whether it was recommended).

9. Unsuccessful applicants

- Why businesses were unsuccessful.
- Whether the application was assessed fairly.

10. Scorecard measures

Each scheme was given a score for its key aspects e.g.

- the proportion of all successful respondents giving a rating of '4' or '5' for 'the product overall' – 73 per cent of respondents to W5; and
- the sum of all successful respondents giving a rating of '4' or '5' at the various quality ratings divided by the sum of all those asked each question – 60 per cent of respondents to W5.

Questionnaire structure

Some qualitative (open) questions were included in this survey though it was mainly made up of closed, pre-coded answer questions.

Introduction

- Introduction making reference to the relevant scheme.
- Establishing who is the best person to talk to about the scheme.
- Clarify which scheme this interview is referring to, when the application was made and whether scheme was taken up.
- Applications to scheme – establishing whether accepted.

Scheme take-up (A)

- Whether scheme recommended.
- How heard about scheme (Business Link advisors).
- Motivation behind applying for the scheme (and one most important factor).
- Other support sources.
- What would they have done if this application had not been successful?

Scheme Assessment (B)

- Rating from 1-5 all aspects of the scheme (people in contact with, guidance notes and materials, advice received, time to process application and overall satisfaction).
- Whether would recommend the scheme to others.

Comparison with Expectations (C)

- Overall experiences of the scheme.
- Whether aspects of the scheme were clear (eligibility criteria, format and content, terms and conditions).
- Satisfaction with the help received.

Impact/Outcomes (D)

- Benefits of scheme (both **hard and soft** benefits: improved products, better skills, improved management, provided capital, safeguarding jobs, new staff).
- Rating from 1-5 of each benefit mentioned.
- Estimates of figures (increase in sales/profit **due to the scheme**).
- Whether would have achieved these results regardless of scheme and how/where from.
- Applications to other schemes and whether this scheme had any impact on the new application.

Quantifying financial impact (E)

- Current turnover (exact figure or estimation).
- Staff/labour costs (exact figure or estimation).
- Profits and losses (exact figure or estimation).

- Costs to the business of participating in the scheme, extra staff costs, equipment, participation charges (exact figure or estimation).
- Whether gains greater than costs.
- Financial gain as result of the scheme (exact figure or estimation).
- Whether would have made this money regardless of participation in the scheme.
- Confidence of accuracy of figures given.
- Suggestions for improvements to the scheme.

Unsuccessful applicants (G)

- Explanation for why unsuccessful and rating from 1-5 of satisfaction with explanation.
- Whether assessment was fair.
- Whether have/will have achieved same perceived results regardless of non-participation (or whether project went ahead regardless).
- Whether could have got the same help from another external source.
- Suggestions for improvements to the scheme.

Scheme Proliferation Assessment (H)

- Knowledge and opinions of government schemes.

Profiling (F)

- Business status.
- Number of employees.
- Business growth and growth objectives.
- Whether participation or non-participation in scheme affected growth objectives.
- Annual turnover (exact figure or estimation).
- Staff/labour costs (exact figure or estimation).
- Profits and losses (exact figure or estimation).
- Whether have business plan.
- Number of directors (degrees, men/women, ethnic minority groups).
- Agree to re-contact.

APPENDIX B STAGE ONE INTERVIEW GUIDES

Topic guide for interviews with BERR stakeholders

Respondent details

- ◆ Respondent background before joining BERR
- ◆ Current title
- ◆ Length of time in post
- ◆ Principal activities
- ◆ Role in commissioning surveys and other research

1. Survey background

- ◆ Description of the policy context
- ◆ Decision to commission survey
 - Reasons for commissioning
 - Who took decision
- ◆ Overall objectives of the survey
 - Hard measurement outcomes sought
 - Soft measurement outcomes sought
 - How measurement objectives are used

2. Survey design & methodology

- ◆ Who was contractor
- ◆ Who managing the survey: analyst/researcher or policy person
- ◆ Who took lead over survey design: respective roles of contractor & Dept
- ◆ Discussions over methodology & implementation
- ◆ Any constraints over methodology used: e.g. budget, time
- ◆ Respective roles in questionnaire design

3. Implementation

Sampling

- ◆ How most suitable respondent is selected
- ◆ Screening process to ensure appropriate respondents
- ◆ Whether appointments made for interview
 - If prior warning given where detailed and accurate information required

Methodology

- ◆ Views about methodology used: telephone
 - Time limitation
- ◆ Extent to which survey mode is commensurate with level of detail and accuracy targeted
- ◆ Respondent self-interest to participate meaningfully

Questionnaire

- ◆ Views about question formulation
 - Ability of respondents to comprehend terms used
- ◆ Views about the ability of the questionnaire to:
 - Obtain accurate, "hard" information
 - Lead respondents along a road" from soft to hard outcome data
 - Elicit meaningful data about the counterfactual

Respondent behaviour

- ◆ Ability of respondents to provide accurate information
- ◆ Accuracy of respondent answers
 - Response geared to benefit
- ◆ Views about response bias
 - Unit & item non-response

4. Survey findings

- ◆ Extent to which survey yielded data sought
 - Whether measuring what intended: why/why not
 - Possible sources of error
 - Where are the gaps in data required
- ◆ Views about reliability of outcome data obtained
 - Level of accuracy that is acceptable
 - What trade offs prepared to make
 - How much room for manoeuvre
- ◆ Views about comparability of responses across all respondents
 - How dealt with outliers: whether any edit checks built in
- ◆ How have used the information obtained
 - Soft measurements
 - Hard measurements

5. What want from this study

- ◆ For this particular survey, what should be the primary focus

Topic guide for interviews with contractors

Respondent details

- ◆ Respondent title
- ◆ What role involves
- ◆ Details of previous experience
- ◆ Experience of carrying out research for government departments

1. The survey

- ◆ Survey details
 - Key objectives
 - Sample size and composition
 - Methodology used
 - Length of interview
 - Outputs
 - Start and end dates
- ◆ Contact(s) within BERR

2. Survey design

- ◆ Views about the ITT received
 - Clarity of the objectives
 - Information about how findings to be used
 - Suggestions for methodology
- ◆ Extent to which proposal reflected the ITT
 - How & why
 - Ways in which differed
 - Perceived constraints over survey design
- ◆ Who involved in decisions about survey design
 - Extent to which consulted with BERR clients
- ◆ Whether any presentation bid carried out
 - Who attended from this organisation

3. Questionnaire design

- ◆ The process
 - Who involved and respective roles
 - Whether those involved in the tendering process or not
- ◆ How went about designing questionnaire
 - Guiding principles
 - Decisions about question formulation
- ◆ Degree of consultation with BERR clients
 - Role of BERR clients in the process
 - Degree of satisfaction with clients' role
- ◆ Whether questions piloted or tested before survey: why/why not

4. Survey implementation: an assessment

- ◆ Sampling:
 - Whether targeted appropriate respondent
 - Screening process to ensure appropriate respondents
- ◆ Views about methodology used:
 - Pros and cons of methodology used, and why
 - Extent to which survey mode was commensurate with level of detail and accuracy targeted
 - What changes would make with hindsight
- ◆ Response
 - Satisfaction with response rates

- Ability of respondents to provide the information required
- Views about response bias: unit and item non-response
- ◆ Extent to which questionnaire design did/did not work: how and why
 - Ability of respondents to comprehend terms used
 - Whether able to yield all types of data required including soft and hard data: why/why not
 - Whether able to elicit meaningful data about the counterfactual

⇒ *Go through questionnaire asking respondent to highlight types of questions that were more/less successful*

- Reasons for their views

5. Survey findings

- ◆ Extent to which survey findings met research objectives
 - Whether measuring what intended: why/why not
 - Where are the gaps in data required
- ◆ Views about reliability of outcome data obtained
 - Possible sources of error
- ◆ Views about comparability of responses across all respondents
 - How dealt with outliers: whether any edit checks built in
- ◆ Timeliness of survey: whether the various stages were completed within the agreed timetable; any modifications to the timetable on route- reasons

6. Overall assessment

- ◆ Overall view about how well the survey worked in practice
 - Principal reasons for any problems experienced
- ◆ What would do differently in hindsight
 - Reasons
- ◆ Views about relationship with BERR clients
 - How could that have been improved
- ◆ Any other points

Topic guide for interviews with survey respondents

Research objectives

- To understand the difficulties respondents face in providing information on economic impact
- To explore who is best placed within the organisation to provide this information
- To identify potential sources of error in the information provided
- To map the factors that can affect respondents' willingness to participate in the survey

Respondent details

- ◆ Respondent title
- ◆ Length of time in post
- ◆ Principal activities
- ◆ Nature, size and age of company
- ◆ Scheme participated in (SIBBP, GRD, KTP, GIII) or grant received (SFIE)
- ◆ Whether involvement in scheme or work involving grant is now complete

1. Ability to provide information

READ OUT EXACTLY AS WORDED

I am now going to run through some of the questions you might be asked as part of a BERR survey about the scheme you took part in or the grant you received. I'd like you to try and answer them and as you do so talk me through any issues they raise. We'll then talk about these issues a bit more.

The first few questions are about the benefits you might have experienced that resulted from the <scheme/grant> and whether you would have experienced these regardless of the <scheme/grant>.

D5. Which of the following best describes your view on the contribution (your participation in the scheme/receiving the grant) has made to your firm, or is expected to make to your firm?

READ OUT - SINGLE CODE

- We would (have) achieve(d) similar results anyway
- We would (have) achieve(d) similar results, but not as quickly
- We would (have) achieve(d) some but not all of the results
- We probably would not (have) achieve(d) similar results
- We definitely would not (have) achieve(d) similar results
- (None of these)

Probes:

- What information is the question asking for?
- How did you decide/work out what to answer?
- What did you think about when you answered?
- How easy or difficult did you find answering the question?

D6a - To what extent would you agree with the statement 'the <scheme/grant> has provided me with something, or will provide me with something I could not have got from any other source'? Please use a scale of 1 to 5 where 5 is agree strongly and 1 is disagree strongly.

1 - Disagree strongly

2

3

4

5 - Agree strongly

(Don't know)

D6b – What was it that the <scheme/grant> provided you with, or is expected to provide you with that you couldn't have got elsewhere?

Probes:

What sorts of things were you thinking about?

How did you decide on your answer to this question?

How easy or difficult did you find answering the question?

Where else could have provided you with the same the <scheme/grant>?

The next few questions are about the financial performance of your company. These questions are designed to enable BERR to assess the impact or likely impact of your participation in <scheme/grant>.

Annual turnover

F6 – Firstly, can I ask, what is the current annual turnover of your business?

READ OUT: You may also refer to turnover as income, sales, invoices or receipts

£

(Don't know)

(Refused)

IF DK

F6a - If you had to estimate your current annual turnover, roughly into which of the following bands would you put your business?

READ OUT – SINGLE CODE

£0

Less than £100,000

£100,000 - £500,000

£500,000 - £2million

£2million - £10million

£10million - £50million

More than £50million

(Don't know)

(Refused)

Probes:

What information did you think the question was asking for?

How easy or difficult did you find answering the question? Why?

How did you go about coming up with an answer to this question? Explore Rs involvement/ knowledge of financial matters within the company. If a multi site org – what is the answer for – this site or company as whole? Are there records R could refer to? Accessibility of info?

How accurate do you think your answer is?

Staff labour costs

F9a – Approximately what are your current overall annual staff / labour costs?

AS NECESSARY **Please include all employee costs, such as salaries, pensions, social security, and dividends paid to Directors.**

£

(Don't know)

(Refused)

IF DK

F10 - If you had to estimate your overall staff / labour costs, into which of the following bands would you place your business?

READ OUT – SINGLE CODE

£0

Less than £100,000

£100,000 - £500,000

£500,000 - £2million

£2million - £10million

£10million - £50million

More than £50million

(Don't know)

(Refused)

Probes:

What information did you think the question was asking for?

How easy or difficult did you find answering the question? Why?

How did you go about coming up with an answer to this question? Explore Rs involvement/ knowledge of financial matters within the company. If a multi site org – what is the answer for – this site or company as whole? Are there records R could refer to? Accessibility of info?

How accurate do you think your answer is?

Annual bottom line profits/losses

F13_1 – Is your company currently making an annual profit or loss?

Profit 1
Loss 2

F13c – Approximately what are your current annual bottom-line <profits/losses>?

READ AS NECESSARY: You may also refer to bottom line profit as pre-tax profit

£
(Don't know)

IF DK

F13d - If you had to estimate your annual bottom line <profits/losses>, into which of the following bands would you place your business? READ OUT – SINGLE CODE

£0
Less than £100,000
£100,000 - £500,000
£500,000 - £2million
£2million - £10million
£10million - £50million
More than £50million
(Don't know)
(Refused)

Probes:

What information did you think the question was asking for?

How easy or difficult did you find answering the question? Why?

How did you go about coming up with an answer to this question? Explore Rs involvement/ knowledge of financial matters within the company. If a multi site org – what is the answer for – this site or company as whole? Are there records R could refer to? Accessibility of info?

How accurate do you think your answer is?

Costs of participating in scheme

I'd now like to move on to thinking specifically about the financial impact of participating in the scheme.

E1a – What has been, or will be, the total costs to your business of participating in the scheme, including the cost of any subsequent action you may have taken or be planning to take? This might include extra staff costs and the costs of capital equipment as well as out of pocket expenses or other cash costs?

PLEASE CODE NULL FOR TOO EARLY TO TELL

Write in amount in £ (MAY BE ZERO)

(Null)
(Don't know)
(Refused)

IF DK

E1b - If you had to estimate these total cash or out of-pocket costs, into which of the following bands would you put them?

READ OUT – SINGLE CODE

PLEASE CODE NULL FOR TOO EARLY TO TELL

Zero/nothing	1
Up to £500	2
£501 -£1,000	3
£1,001 -£2,000	4
£2,001 -£5,000	5
£5,001 -£10,000	6
£10 001 -£20 000	7
£20 001 -£50 000	8
£50 001 -£100,000	9
£100,001 -£500,000	10
£500,001 -£1million	11
£1,000,001 -£5million	12
More than £5million	13
(Null)	16
(Don't know)	14
(Refused)	15

Probes:

What information did you think the question was asking for?

How easy or difficult did you find answering the question? Why?

How did you go about coming up with an answer to this question? Explore Rs involvement/ knowledge of financial matters within the company. If a multi site org – what is the answer for – this site or company as whole? Are there records R could refer to? Accessibility of info?

How accurate do you think your answer is?

E4 – Considering the financial gains, in terms of your bottom line profit, to your business of participating in the scheme and still including any subsequent action you may have taken or be planning to take, would you say that the gains were greater than the costs, about the same as the costs or less than the costs?

Greater than the costs	1
About the same as the costs	2
Less than the costs	3
(None apply)	4
(Don't know)	5
(Null)	6

Probes:

What information did you think the question was asking for?

How easy or difficult did you find answering the question? Why?

How did you go about coming up with an answer to this question? Explore Rs involvement/ knowledge of financial matters within the company. If a multi site org – what is the answer for – this site or company as whole? Are there records R could refer to? Accessibility of info?

How accurate do you think your answer is?

E5a – I would now like you to consider the financial gain to your business, in terms of its bottom line profit, of <receiving the grant/participating in the scheme>, including any subsequent action you may have taken or be planning to take. Please could you estimate what the gross financial gain has been or will be in £s.

ADD IF NECESSARY: **(Please just give me your best estimate).**

PLEASE CODE NULL FOR TOO EARLY TO TELL.

THIS FIGURE IS ANNUAL AS OPPOSED TO TOTAL GAIN.

INSERT NUMBER (May be Zero)

(Don't know)

(Refused)

(Null)

IF DK

E5b - If you had to estimate the total financial gains, into which of the following bands would you put them? READ OUT – SINGLE CODE

Zero/nothing	1
Up to £500	2
£501 -£1,000	3
£1,001 -£2,000	4
£2,001 -£5,000	5
£5,001 -£10,000	6
£10 001 -£20 000	7
£20 001 -£50 000	8
£50 001 -£100,000	9
£100,001 -£500,000	10
£500,001 -£1million	11
£1,000,001 -£5million	12
More than £5million	13
(Don't know)	14
(Refused)	15
(Null)	16

Probes:

What information did you think the question was asking for?

How easy or difficult did you find answering the question? Why?

How did you go about coming up with an answer to this question? Explore Rs involvement/ knowledge of financial matters within the company. If a multi site org – what is the answer for – this site or company as whole? Are there records R could refer to? Accessibility of info?

How accurate do you think your answer is?

Were you thinking about profits or turnover?

Were you thinking of an annual or total figure?

E7d1 – Thinking again about the earlier figure of [E5a/E5b], had you not <received the grant/participated in the scheme> approximately what proportion of this financial gain would you expect to realise anyway, in the same timeframe?

REASSURE AS NECESSARY **Please just provide me with your best estimate.**

Proportion:
(Don't know)
(Refused)

IF DK

E7d2 - If you had to estimate this proportion, into which of the following bands would it fall?

READ OUT – SINGLE CODE

All of it (100%)	1
More than 80% of it	2
60%-80% of it	3
40%-60% of it	4
20%-40% of it	5
Less than 20% of it	6
None of it (0%)	7
(Don't know)	8

Probes:

What information did you think the question was asking for?

How easy or difficult did you find answering the question? Why?

How did you go about coming up with an answer to this question? Explore Rs involvement/ knowledge of financial matters within the company. If a multi site org – what is the answer for – this site or company as whole? Are there records R could refer to? Accessibility of info?

How accurate do you think your answer is?

PROBE ABOUT FOLLOWING ISSUES IF NOT EXPLORED WHEN ASKING SURVEY-SPECIFIC QUESTIONS

2. General follow up to questions

- ◆ Which questions were easy to answer? Why?
- ◆ Which questions were difficult to answer? Why?
- ◆ Counterfactual: How easy or difficult did you find thinking about what might have happened?
- ◆ Question order, how well did it work, improvements

3. Accuracy

- ◆ Where does this information come from (company records, top of head, guesstimate)
- ◆ Accuracy of information (very accurate, reasonable ballpark assessment, not at all confident in accuracy of figures given)
- ◆ Whether conducted any calculations on the <scheme/grants> impact on costs and financial gains prior to the interview

4. Motivation

- ◆ Motivation to provide an accurate answer (how motivated, what would make respondent more motivated, face to face, letter in advance stating information required)

5. Taking part

- ◆ Reactions to request to participate in this study
- ◆ Factors affecting participation in a BERR survey about its products/grants that you have applied for (mode, length of interview, timing, whether successful with application, views on successful of product for business, concerns about confidentiality)
- ◆ Expectations about what information might be asked for (kind of information required)
- ◆ Who would/ should we talk to if we want to know about:
 - ◆ decision making process about applying for grant/loan, using product
 - ◆ financial impact on company of grant/loan, using product

Probe for details of person/people (job title, location, why them)

- ◆ Experience of taking part in previous surveys (telephone v face to face, preference, time involved)

6. Suggestions for improvements

To the way we make contact with businesses

How we contact them and conduct the interview

Amount of information collected

Type of information collected

Confidentiality

Other issues

END

Thank respondent for their time. Reiterate confidentiality.

APPENDIX C RECOMMENDED QUESTIONS FOR MEASURING ECONOMIC CHANGE AND THE COUNTERFACTUAL

This annex displays the questions recommended in the round two cognitive report, for measuring economic change and the counterfactual. Question numbering throughout this section refers to the numbering used in the second round of cognitive testing, shown in **red** and in (brackets). The full questionnaire is contained in Appendix C of McGee A, Andrews F, Legard R (2009) Self Assessment as a Tool to Measure *the Economic Impact of BERR policies: findings from stage two cognitive testing*. New questions, following the second round of testing, are denoted as such and numbered (**NEW1**, **NEW2** and so on).

❖ Multi-site businesses: unit of analysis²⁶

Ask all

I would like to begin by asking you some general questions about this workplace, that is the premises that you mainly work at and not including any other premises that may belong to your business or to workplaces different and separate to yours.

NEW1 *What is the main activity of this workplace?*

INTERVIEWER: WRITE IN: _____

NEW2 *Is this workplace one of a number of different workplaces in the UK belonging to the same business, a single independent workplace or the sole UK workplace of a foreign business?*

One of a number of different workplaces in the UK

belonging to the same business

(Go to NEW3)

Single independent workplace

(Go to next section)

Sole UK workplace of a foreign business

(Go to NEW6)

IF PART OF A LARGER ORGANISATION IN THE UK

NEW3 *How many workplaces, including this one, are there within your business in the UK? WRITE IN:*

NEW4 *Approximately, how many employees are on the UK payroll of your business (i.e. England, Scotland, Wales and Northern Ireland)? That is the whole business in the UK, not just your present location where you work? WRITE IN:*

NEW5 *And how many employees are there on the UK payroll at this/your workplace? WRITE IN:*

NEW6 *When answering the following questions please think about the UK workplace only.*

²⁶ These questions were adapted from questions used as part of the Workplace Employment Relations Survey (WERS). <http://www.berr.gov.uk/whatwedo/employment/research-evaluation/wers-2004/index.html>

❖ **Benefits resulting from the intervention (Q1-3)**

The intervention's contribution to the business (Q1)

<p>Ask all</p> <p><i>I am now going to ask you some questions about the scheme you took part in or the grant you received.</i></p> <p><i>The first few questions are about the benefits you might have experienced that resulted from...</i></p> <p><i>...your participation in <GRD, GIII, KTP, SIBBP> and whether you would have experienced these regardless of this participation.</i></p> <p><i>...receiving a grant from <SFIE> and whether you would have experienced these regardless of the grant.</i></p> <p><i>...receiving a loan guaranteed by the <SFLG> scheme and whether you would have experienced these regardless of the scheme.</i></p> <hr/> <p>IF MULTI SITE</p> <p>NEW7 <i>When thinking about the contribution...</i></p> <p><i>...your participation in <GRD, GIII, KTP, SIBBP> has made to your business/workplace, would you prefer to answer for this/your workplace only or for the business as a whole?</i></p> <p><i>...receiving a grant from <SFIE> has made to your business/workplace, would you prefer to answer for this/your workplace only or for the business as a whole?</i></p> <p><i>...receiving a loan guaranteed by the <SFLG> scheme has made to your business/workplace, would you prefer to answer for this/your workplace only or for the business as a whole?</i></p> <table><tr><td>This workplace only</td><td>1</td></tr><tr><td>The business as a whole</td><td>2</td></tr><tr><td>(Don't Know)</td><td>3</td></tr><tr><td>(Refused)</td><td>4</td></tr></table>	This workplace only	1	The business as a whole	2	(Don't Know)	3	(Refused)	4
This workplace only	1							
The business as a whole	2							
(Don't Know)	3							
(Refused)	4							

Q1 Which of the following best describes your view on the contribution...

...your participation in <GRD, GIII, KTP, SIBBP> has made to your <business/workplace>, or is expected to make to your <business/workplace>...

...receiving a grant from <SFIE> has made to your <business/workplace>, or is expected to make to your <business/workplace>?

...receiving a loan guaranteed by the <SFLG> scheme has made to your <business/workplace>, or is expected to make to your <business/workplace>?

- | | |
|---|---|
| We would (have) achieve(d) similar results anyway | 1 |
| We would (have) achieve(d) similar results but it would have taken longer | 2 |
| We probably would not (have) achieve(d) similar results | 3 |
| We definitely would not (have) achieve(d) similar results | 4 |
| (None of these) | 5 |
| (Don't Know) | 6 |
| (Refused) | 7 |

Whether intervention provided something unique (Q2-3)

Ask all

Q2 I am going to read out a statement. Please use a scale of 1 to 5 for your answer. 1 is 'agree strongly' and 5 is 'disagree strongly'.

(Again, thinking about <this/your workplace only/the business as a whole>), To what extent would you agree with this statement:

The <GRD, GIII, KTP, SIBBP, SFIE> has provided, or will provide, a support package that I could not have got from any other source'?

Receiving the loan guaranteed by the SFLG scheme has allowed us to achieve something that we could not have achieved in any other way?

May I remind you that 1 is 'agree strongly' and 5 is 'disagree strongly'.

- 1 - Agree strongly
- 2
- 3
- 4
- 5 - Disagree strongly
- (Don't Know)
- (Refused)

The next question (3a or 3b) is not asked of those in receipt of **SFLG**
If **SFLG** go to Q4

IF Q2= 1 or 2

Q3a

What was it that the <GRD, GIII, KTP, SIBBP, SFIE> provided you with, or is expected to provide you with that you couldn't have got elsewhere?

INTERVIEWER: WRITE IN: _____

IF Q2= 3, 4 or 5

Q3b

- What or who could have provided you with the same as the <GRD, GIII, KTP, SIBBP, SFIE>?

INTERVIEWER: WRITE IN: _____

❖ **Financial profile of the company (Q4-7c)**

Annual turnover (Q4-5b)

Ask all

The next few questions are about the financial performance of your business.

Q4 *Please can you tell me when your business's financial year starts and finishes?*

Interviewer: if financial year varies ask for the last complete financial year.

INTERVIEWER: PLEASE CODE THE START MONTH.

January	01
February	02
March	03
April	04
May	05
June	06
July	07
August	08
September	09
October	10
November	11
December	12

INTERVIEWER: PLEASE CODE THE END MONTH.

January	01
February	02
March	03
April	04
May	05
June	06
July	07
August	08
September	09
October	10
November	11
December	12

Q5a What was the annual turnover of your business in the last complete financial year? You may also refer to turnover as income, sales, invoices or receipts.

£

(Don't Know)

(Refused)

IF Q5a=DK

Q5b If you had to estimate the annual turnover of your business in the last complete financial year, roughly into which of the following bands would you place it?

READ OUT

£0	01
Less than £100,000	02
£100,000 but less than £500,000	03
£500,000 but less than £1million	04
£1million but less than £2million	05
£2million but less than £5million	06
£5million but less than £10million	07
£10million but less than £25million	08
£25million but less than £50million	09
More than £50million	10
(Don't Know)	11
(Refused)	12

NEW8 Were you thinking about annual turnover before or after tax?

Before tax	1
After tax	2
(Don't Know)	3
(Refused)	4

IF MULTI-SITE BUSINESS

NEW9 And what was the annual turnover for this/your workplace in the last complete financial year? You may also refer to turnover as income, sales, invoices or receipts.

£

(Don't Know)

(Refused)

IF NEW9=DK

NEW10 *If you had to estimate the annual turnover for this/your workplace in the last complete financial year, roughly into which of the following bands would you place it?*

READ OUT

£0	01
Less than £100,000	02
£100,000 but less than £500,000	03
£500,000 but less than £1million	04
£1million but less than £2million	05
£2million but less than £5million	06
£5million but less than £10million	07
£10million but less than £25million	08
£25million but less than £50million	09
More than £50million	10
(Don't Know)	11
(Refused)	12

NEW11 *Were you thinking about annual turnover before or after tax?*

Before tax	1
After tax	2
(Don't Know)	3
(Refused)	4

Staff/labour costs (Q6a-b)

Ask all

NEW12 *The next question is about total employment costs. When thinking about total employment costs, would you prefer to answer for this/your workplace only or for the business as a whole?*

This workplace only	1
The business as a whole	2
(Don't Know)	3
(Refused)	4

Q6a *Approximately what were the total employment costs, to this <business/workplace> in the last complete financial year? Please include all employee costs, such as salaries, pensions, social security, dividends paid to Directors and redundancy pay.*

£

(Don't Know)
(Refused)

IF Q6a=DK

Q6b *If you had to estimate the total employment costs, to this <business/workplace> in the last complete financial year, into which of the following bands would you place them?*

READ OUT

£0	01
Less than £100,000	02
£100,000 but less than £500,000	03
£500,000 but less than £1million	04
£1million but less than £2million	05
£2million but less than £5million	06
£5million but less than £10million	07
£10million but less than £25million	08
£25million but less than £50million	09
More than £50million	10
(Don't Know)	11
(Refused)	12

Annual profits/losses (Q7a-c)

Ask all

NEW13 *The next questions are about profits and losses. When thinking about profits and losses, would you prefer to answer for this/your workplace only or for the business as a whole?*

- | | |
|-------------------------|---|
| This workplace only | 1 |
| The business as a whole | 2 |
| (Don't Know) | 3 |
| (Refused) | 4 |

Q7a *In the last complete financial year, did your <business/workplace> make an annual profit or loss?*

- | | |
|-------------------------------|---------------|
| Profit | 1 (Go to Q7b) |
| Loss | 2 (Go to Q7b) |
| (Neither a profit nor a loss) | 3 (Go to NEW) |
| (Don't Know) | |
| (Refused) | |

Q7b *Approximately what was your annual <profit/loss> for the last complete financial year?*

- £
(Don't Know)
(Refused)

IF Q7b=DK

Q7c *If you had to estimate your annual <profits/losses> for the last complete financial year, into which of the following bands would you place them?*

READ OUT

- | | |
|-------------------------------------|----|
| £0 | 01 |
| Less than £100,000 | 02 |
| £100,000 but less than £500,000 | 03 |
| £500,000 but less than £1million | 04 |
| £1million but less than £2million | 05 |
| £2million but less than £5million | 06 |
| £5million but less than £10million | 07 |
| £10million but less than £25million | 08 |
| £25million but less than £50million | 09 |
| More than £50million | 10 |
| (Don't Know) | 11 |
| (Refused) | 12 |

NEW14 *Were you thinking of your annual <profit/loss> before or after tax?*

- | | |
|--------------|---|
| Before tax | 1 |
| After tax | 2 |
| (Don't Know) | 3 |
| (Refused) | 4 |

❖ Financial impact of participating in the scheme (Q8a-11b)

Costs of participating in the intervention (Q8a-f)

The next set of questions are not asked of those in receipt of **SFLG**

Now I'd like you to move on to think specifically about the financial impact of...

...your participation in <GRD, GIII, KTP, SIBBP>. This section will ask firstly about costs and secondly about returns to your business/workplace to date, resulting from your participation in <GRD, GIII, KTP, SIBBP>.

...receiving a grant from <SFIE>. This section will ask about firstly about costs and secondly about returns to your business/workplace to date, resulting from receiving a grant from <SFIE>.

NEW15 When thinking about the costs of...

...your participation in <GRD, GIII, KTP, SIBBP>, would you prefer to answer for this/your workplace only or for the business as a whole?

...receiving a grant from <SFIE>, would you prefer to answer for this/your workplace only or for the business as a whole?

- | | |
|-------------------------|---|
| This workplace only | 1 |
| The business as a whole | 2 |
| (Don't Know) | 3 |
| (Refused) | 4 |

NEW16 Firstly thinking about costs, if you had to estimate the total costs to your <business/workplace>, to date...

resulting from your participation in <GRD, GIII, KTP, SIBBP>, into which of the following bands would you place them?

from receiving a grant from <SFIE>, into which of the following bands would you place them?

READ OUT

- | | |
|-------------------------------------|-------------------------|
| £0 | 01 (Go to next section) |
| Less than £100,000 | 02 (Go to Q8c1) |
| £100,000 but less than £500,000 | 03 (Go to Q8c1) |
| £500,000 but less than £1million | 04 (Go to Q8c1) |
| £1million but less than £2million | 05 (Go to Q8c1) |
| £2million but less than £5million | 06 (Go to Q8c1) |
| £5million but less than £10million | 07 (Go to Q8c1) |
| £10million but less than £25million | 08 (Go to Q8c1) |
| £25million but less than £50million | 09 (Go to Q8c1) |
| More than £50million | 10 (Go to Q8c1) |
| (Don't Know) | 11 (Go to Q8c1) |
| (Refused) | 12 (Go to Q8c1) |

Q8c1 Now thinking only about staff time and salaries, what have been the total costs to your <business/workplace>, to date, of staff time and salaries?

£

(Don't Know)

(Refused)

IF Q8c1=DK

Q8c2 If you had to estimate the total costs to your <business/workplace>, to date, of staff time and salaries, into which of the following bands would you place them?

READ OUT

£0	01
Less than £100,000	02
£100,000 but less than £500,000	03
£500,000 but less than £1million	04
£1million but less than £2million	05
£2million but less than £5million	06
£5million but less than £10million	07
£10million but less than £25million	08
£25million but less than £50million	09
More than £50million	10
(Don't Know)	11
(Refused)	12

Q8c3 Next, thinking about consultancy, what have been the total consultancy costs to your <business/workplace>, to date?

£

(Don't Know)

(Refused)

IF Q8c1=DK

Q8c4 If you had to estimate the total consultancy costs to your <business/workplace>, to date, into which of the following bands would you place them?

READ OUT

£0	01
Less than £100,000	02
£100,000 but less than £500,000	03
£500,000 but less than £1million	04
£1million but less than £2million	05
£2million but less than £5million	06
£5million but less than £10million	07
£10million but less than £25million	08
£25million but less than £50million	09
More than £50million	10
(Don't Know)	11
(Refused)	12

Q8c5 Now thinking about materials and equipment, what have been the total costs to your <business/workplace>, to date, of materials and equipment?

£

(Don't Know)

(Refused)

IF Q8c1=DK

Q8c6 If you had to estimate the total costs to your <business/workplace>, to date, of materials and equipment, into which of the following bands would you place them?

READ OUT

£0	01
Less than £100,000	02
£100,000 but less than £500,000	03
£500,000 but less than £1million	04
£1million but less than £2million	05
£2million but less than £5million	06
£5million but less than £10million	07
£10million but less than £25million	08
£25million but less than £50million	09
More than £50million	10
(Don't Know)	11
(Refused)	12

Q8c7 And lastly, thinking about training and mentoring, what have been the total costs to your <business/workplace>, to date, of training and mentoring?

£

(Don't Know)

(Refused)

IF Q8c1=DK

Q8c8 If you had to estimate the total costs to your <business/workplace>, to date, of training and mentoring, into which of the following bands would you place them?

READ OUT

£0	01
Less than £100,000	02
£100,000 but less than £500,000	03
£500,000 but less than £1million	04
£1million but less than £2million	05
£2million but less than £5million	06
£5million but less than £10million	07
£10million but less than £25million	08
£25million but less than £50million	09
More than £50million	10
(Don't Know)	11
(Refused)	12

NEW17 Have there been any other costs to your <business/workplace>, in addition to those you have just given me?

- | | |
|--------------|----|
| Yes | 01 |
| No | 02 |
| (Don't Know) | 11 |
| (Refused) | 12 |

NEW18 What were these additional costs for? WRITE IN:

Q8d Thinking about these additional costs to your <business/workplace>, to date, what have the total costs been?

- £
- | | |
|--------------|--|
| (Don't Know) | |
| (Refused) | |

IF Q8d=DK

Q8e If you had to estimate these additional costs to your <business/workplace>, to date, into which of the following bands would you place them?

READ OUT

- | | |
|-------------------------------------|----|
| £0 | 01 |
| Less than £100,000 | 02 |
| £100,000 but less than £500,000 | 03 |
| £500,000 but less than £1million | 04 |
| £1million but less than £2million | 05 |
| £2million but less than £5million | 06 |
| £5million but less than £10million | 07 |
| £10million but less than £25million | 08 |
| £25million but less than £50million | 09 |
| More than £50million | 10 |
| (Don't Know) | 11 |
| (Refused) | 12 |

Q8a Overall, do you feel that the costs to your <business/workplace>, to date...

of your participation in <GRD, GIII, KTP, SIBBP> have been...

from receiving a grant from <SFIE> have been...

- | | |
|--------------|---|
| Significant | 1 |
| Moderate | 2 |
| Minimal | 3 |
| (Don't Know) | 4 |
| (Refused) | 5 |

Whether financial gains are greater than the costs (Q9a-d)

The next set of questions are not asked of those in receipt of **SFLG**
Now I'd like you to think about the financial **returns** to your business/workplace to date, that is up until now, resulting from...

your participation in <GRD, GIII, KTP, SIBBP>.

receiving a grant from <SFIE>.

NEW19 When thinking about the financial returns of...

your participation in <GRD, GIII, KTP, SIBBP>, to date, would you prefer to answer for this/your workplace only or for the business as a whole?

receiving a grant from <SFIE>, to date, would you prefer to answer for this/your workplace only or for the business as a whole?

- | | |
|-------------------------|---|
| This workplace only | 1 |
| The business as a whole | 2 |
| (Don't Know) | 3 |
| (Refused) | 4 |

NEW20 Have there been any financial returns, resulting from...

your participation in <GRD, GIII, KTP, SIBBP>, to date?

receiving a grant from <SFIE>, to date?

- | | |
|--------------|---|
| Yes | 1 |
| No | 2 |
| (Don't Know) | 3 |
| (Refused) | 4 |

Q9c To date, are any financial returns resulting from...

your participation in <GRD, GIII, KTP, SIBBP>, greater than the costs (or is it too early to tell)?

receiving a grant from <SFIE> greater than the costs (or is it too early to tell)?

- | | |
|---|---|
| Yes, financial returns are greater than the costs | 1 |
| No, financial returns are less than the costs | 2 |
| (Financial returns are about the same as the costs) | 3 |
| (Too early to tell) | 4 |
| (Don't Know) | 5 |
| Refused) | 6 |

Financial gain as a result of the intervention (Q10a-f)

If the respondent was asked and could not answer any questions in the previous section (Q9a-d) go straight to Q10e

If **SFLG** ask this section of questions

Thinking again about any financial returns to your business to date, resulting from...

...your participation in <GRD, GIII, KTP, SIBBP>.

...receiving a grant from <SFIE>.

...receiving a loan guaranteed by the <SFLG>.

Q10c *Into which of the following bands would you put these gross financial returns?*

READ OUT

£0	01
Less than £1000	02
1,000 but less than £5,000	03
£5,000 but less than £10,000	04
£10,000 but less than £20,000	05
£20,000 but less than £50,000	06
£50,000 but less than £100,000	07
£100,000 but less than £500,000	08
£500,000 but less than £1million	09
£1million but less than £5million	10
More than £5million	11
(Don't know)	12
(Refused)	13

NEW21 *Were you thinking about financial returns before or after tax?*

Before tax	1
After tax	2
(Don't Know)	3
(Refused)	4

IF MULTI-SITE

NEW22 *Can I just check, when answering these questions were you thinking about this/your workplace or your business as a whole?*

This workplace only	1
The business as a whole	2
(Don't Know)	3
(Refused)	4

Future costs and returns

Ask all

The next set of questions is about any **future** costs and returns resulting from...

your participation in <GRD, GIII, KTP, SIBBP>.

receiving a grant from <SFIE>.

Q8f First thinking about any future **costs** to your <business/workplace> over the next 5 years, that is till <April 2012>, do you expect these costs to...

- | | |
|--------------------|---|
| ...rise | 1 |
| ...remain constant | 2 |
| ...diminish; or | 3 |
| ...cease? | 4 |

ASK IF Q9d=VALID RESPONSE

Q10d Next, thinking about any financial **returns** to your <business/workplace> over the next 5 years, that is till <April 2012>, resulting from...

your participation in <GRD, GIII, KTP, SIBBP>. Do you expect these returns to...

receiving a grant from <SFIE>. Do you expect these returns to...

receiving a loan guaranteed by the <SFLG> scheme. Do you expect these returns to...

- | | |
|--------------------|---|
| ...rise | 1 |
| ...remain constant | 2 |
| ...diminish; or | 3 |
| ...cease? | 4 |

Q9d And now, thinking overall about the financial **returns** to your business over the next 5 years, that is till <April 2012>, resulting from...

...your participation in <GRD, GIII, KTP, SIBBP>, do you expect any financial returns to be greater than the costs (or is it too early to tell)?

...receiving a grant from <SFIE>, do you expect any financial returns to be greater than the costs (or is it too early to tell)?

- | | |
|---|---|
| Yes, financial returns are greater than the costs | 1 |
| No, financial returns are less than the costs | 2 |
| (Financial returns are about the same as the costs) | 3 |
| (Too early to tell) | 4 |
| (Don't Know) | 5 |
| Refused) | 6 |

IF MULTI-SITE

NEW23 *Can I just check, when answering these questions were you thinking about this/your workplace or your business as a whole?*

- | | |
|-------------------------|---|
| This workplace only | 1 |
| The business as a whole | 2 |
| (Don't Know) | 3 |
| (Refused) | 4 |

Q10e *Next, thinking about **non-financial returns** your <business/workplace> will receive, do you anticipate any significant non-financial returns resulting from...*

your participation in <GRD, GIII, KTP, SIBBP>? For example, gaining contacts and new opportunities, increased knowledge and raising the businesses profile.

receiving a grant from <SFIE>? For example, gaining contacts and new opportunities, increased knowledge and raising the businesses profile.

receiving a loan guaranteed by the <SFLG> scheme? For example, gaining contacts and new opportunities, increased knowledge and raising the businesses profile.

- | | |
|--------------|---|
| Yes | 1 |
| No | 2 |
| (Don't Know) | 3 |
| (Refused) | 4 |

IF Q10e=YES

Q10f *What are these non-financial returns?*

WRITE IN: _____

❖ **Whether would have achieved financial gain regardless of intervention: Constructing the counterfactual (Q11a-b)**

NEW24 *The next questions are about how well your business/workplace is currently performing. Would you prefer to answer for this/your workplace only or for the business as a whole?*

- | | |
|-------------------------|---|
| This workplace only | 1 |
| The business as a whole | 2 |
| (Don't Know) | 3 |
| (Refused) | 4 |

Q11a *On a scale of 1-10, where 1 is performing very badly and 10 is performing very well, how well is your <business/workplace> currently performing, in comparison to other similar <businesses/workplaces>?*

1 2 3 4 5 6 7 8 9 10

- | | |
|--|----------|
| <i>Don't know any other similar businesses to compare to</i> | 11 (END) |
| <i>(Don't Know)</i> | 12 (END) |
| <i>(Refused)</i> | 13 (END) |

Q11b *Again, on a scale of 1-10, where 1 is performing very badly and 10 is performing very well, how well do you think your <business/workplace> would currently be performing in comparison to other similar <businesses/workplaces>, if you had not...*

...participated in <GRD, GIII, KTP, SIBBP>?

...received a grant from <SFIE>?

...received a loan guaranteed by the <SFLG> scheme?

1 2 3 4 5 6 7 8 9 10

