



Heart of the City: Good Practice for Data Collection

June 2015

Introduction

Heart of the City (HoTC) contacted Pro Bono Economics (PBE) in 2014 to discuss conducting a social cost-benefit analysis of its Newcomer programme. Data limitations at the time, however, including a small sample size and lack of an adequate control group, meant it was not possible to confidently establish what would have happened to the graduates, or the recipients of their CSR programmes, had they not been on the programme. In economist terms, it was not possible to establish the 'counterfactual'. As the causal impact of the Newcomer programme could not be identified, a robust social cost-benefit analysis could not be conducted.

PBE therefore agreed instead to provide information on good practice for data collection that could be beneficial for future cost-benefit analyses. Some key principles and relevant issues for a future data collection by HoTC for the purpose of conducting an impact evaluation of its Newcomer Programme are set out below.

This work was carried out by a team of economists from the Bank of England for PBE: Richard Galletly, Mariana Gimpelewicz and Victoria Kinahan, with editorial support from Sue Holloway from PBE.

Key principles of good data collection

In summary, the key principles of good data collection include:

- Measuring appropriate outcome variables
- Gathering data on the correct variables of interest
- Establishing the treatment effect by comparing treatment outcomes to 'counterfactual' outcomes (i.e. what would have happened in the absence of a HoTC programme).
- A standardised approach so that responses can be measured and tracked over time

1. What are you trying to measure and who are you asking?

This sounds simple, but is important. Ideally, information would be gathered from the recipients of CSR interventions of the companies on the Newcomer programme. Companies would need to ask the charities they worked with what their contribution to society was as a direct result of HoTC's involvement, and report back to HoTC. However, this may be problematic as the beneficiary charities may themselves be unable to make the distinction between interventions of those on the Newcomer programmes and other funds in a quantitative way.

The next best information to collect would be data on a variable with a clear link to the desired measurable outcomes. An example of this would be a sample of company CSR spend and volunteering hours, before and after joining the programme, which could then be used alongside other analysis on benefits of CSR spend or volunteering to point to improved outcomes, even if these are not fully quantifiable. This should then be augmented with an assessment of how much of this is a direct result of being on the programme. The beneficiary charity outcomes could be described qualitatively in order to assess areas of social benefit to examine further.

2. What is a control group and why is it important?

Any sample can be split into a control group and a treatment group. The difference between these two is that the latter has been 'treated' - ideally this is the only difference.

An example of a good control group relevant to HotC in the case of volunteering hours would be to examine the number of volunteer hours a similar company (see below) would have committed had they not gone through HotC's programme. In principle because the only difference between the two groups is that one has gone through the Newcomer scheme, the difference in volunteer hours between the two groups is the causal impact of HotC's programme.

In reality obtaining such an identical group is extremely difficult (participation would need to be randomly assigned e.g. by picking names out of a hat), but it is important to find as similar a group as possible. HotC may wish to look for companies that are of similar size, location and industry to those in the Graduate programme. Companies that have turned down the programme have self-selected themselves out, so it is not appropriate to use them as a control. For example, if these companies already have successful CSR schemes established, then comparing those attempting to set up a scheme with HotC might lead you to underestimate the effect of your program.

Once a satisfactory control group is established, it is important also to collect identical data on both groups – this allows you to establish what is likely to have happened to your treatment group if they had not been treated.

3. Control Variables

As above, randomisation is not always possible, so collecting data on good control variables is important. A control variable is additional information on a company that can affect the outcome of interest. For example, in the current HotC questionnaire there are questions on company size, industry and location, which are all good control variables. It is important to collect these data and to factor any impact into your calculations so as to ensure that the impact is not inadvertently ascribed to the CSR programme.

4. Collecting data over time

Taking many samples will add a time dimension to your data. This is important as it allows you to assess outcomes before and after treatment and to use this information to establish trends. There are two aspects to collecting data over time:

- a) Sending out the survey at different points in time to different companies. Preferably, companies will be surveyed at a similar time, to avoid time trend problems. For example, if Newcomer graduates are surveyed during an economic downturn and the control group is surveyed during an economic 'boom', this may lead to an underestimation of HotC's impact. However, it might be that in order to sample enough companies, they will have to be surveyed at different points in time. This is acceptable as long as the time in which the survey is completed is recorded, in order for it to be used as a control variable.

- b) Surveying the same companies over time. Beyond surveying the treatment companies before and after going through the program, it is useful to collect data over a longer period. This will allow you to see whether you have had a permanent impact on the company's CSR practices.

5. Sample size

It is impossible to give a definitive minimum sample size for all surveys. This is because an appropriate size will vary from sample to sample depending on properties of the data. For example, analysis requiring the use of more control variables will require a larger sample. Moreover, if the impact you are trying to capture is potentially small, a larger sample will be required for this impact to be picked up in the data.

Having smaller data sets may leave you prone to having many outliers. Outliers are companies reporting results that differ materially from the rest of the respondents. If your samples are small, or you have outliers, it is crucial to think about how to deal with these when summarizing your data. To illustrate this point, we list below the responses from the 2014 HotC Graduation Survey on the size of the CSR budget (question 7). The responses were as follows:

Number	Response Date	CSR budget (£):
1	Aug 10, 2014 4:19 PM	£625,000
2	Jul 17, 2014 1:37 PM	£2,500
3	Jul 11, 2014 11:54 AM	£5,000
4	Jul 7, 2014 8:37 AM	£1,000
5	Jul 2, 2014 4:48 PM	£10,000
6	Jun 30, 2014 7:57 PM	£5,000
7	Jun 25, 2014 8:31 AM	£250,000
8	Jun 16, 2014 8:21 PM	£70,000
9	Jun 11, 2014 10:13 AM	£250

Taking the average of these gives us an average CSR budget per company of over £107,000. However, this masks the variation across firms. A more appropriate measure may be to say that the median firm donation was £5,000, and donations ranged between £250 -£625,000.

The responses also reveal that 22 companies reported they had no budget allocated, and it is important to reflect this information in summarising the results. There is also an important distinction to make between:

- Companies that genuinely have no budget allocated.
- Companies that have a small budget allocated but do not know how much it was, and therefore responded "No budget allocated".

The different answer options as they currently stand do not allow a distinction to be made between the two. And care should be taken where there are missing answers, , as these might be subject to bias. For example, it is more likely that companies that spent a lot of money on the CSR budget will know what the CSR budget was and report it. Therefore, it could be that the majority of the companies that did not report had relatively small budgets, meaning that larger CSR budgets are overrepresented – in other words, this may lead to an overestimation of the size of the CSR budget.

6. Unambiguous questions, and survey length

Clear and unambiguous questions should be set for both the treatment and control group. It is expensive, time consuming and potentially wastes valuable data if questions are misunderstood or ignored, so test out surveys for clarity on small samples (or even other colleagues before sending out). Using dropdown responses as opposed to free text will also help with quantitative analysis. To allow a good comparison, send both the treatment and control group identical questions.

Finally, consider the appropriate length of any survey. Participants are less likely to (at least reliably) fill in a survey if it is onerously long. More data is always better, but more data does not have to mean many more questions in your survey. Instead, focus on the key outcomes you are attempting to measure and the key control variables you need and build a survey around those. It may be that other information required for different purposes could be gathered in different ways eg via company visits etc.

Heart of the City survey questions

The following section suggests some ways in which the current HotC survey could incorporate the above key principles. We examine two questions in detail, to illustrate how they could be re-worked in order to use the results for measuring impact.

Q26 of the current survey asks:

“Have you experienced cost savings as a result of your environmental programme in the last 18 months? If so, please record your response in the box below to the nearest whole number. Please do not use any commas or decimal points. If you cannot state an exact figure, please give your best estimate.”

The issue here is that it is often difficult to identify whether costs savings happened directly as a result of their environmental programmes. This is because they do not know what their costs would have been in the programme’s absence – this is what a control group allows you to help estimate. In the case of the HotC survey, only two companies answered the question, and the answers varied markedly. It may be beneficial to frame the question in terms of the outcome of a successful environmental programme, and ask for those outcomes directly. One way of doing this could be to use utility usage / bills. Clearly there are still many factors that affect the size of a firm’s utility bills, such as size, sector, weather in a particular year, or energy consumption reduction and water conservation activities already in use. This demonstrates the importance of control variables.

As above, directly measuring the outcome variable, such as using less water, is more effective for measuring impact. Moreover, this can be paired with information about what types of environmental programmes have been put in place to identify whether some programmes are more effective than others (e.g. the activities listed under question 25 of your survey).

An improved format for this question could be:

Q. Have you put in place an environmental programme as a result of being on the graduate programme?

Yes

No, but there are plans to set one up

No, there are no plans to set one up

No, there was one in place already

Q. Please indicate which of the following most closely characterise the environmental programmes you have put in place or further developed within your organization in the last 18 months.

Waste reduction and recycling

Energy consumption reduction

Water conservation

Incentive to take sustainable transport

Renewable energy uptake

Q. Please record below the environmental costs your company has incurred in the last 12 months for each category below.

	<i>Estimated cost in £</i>
<i>Water usage</i>	
<i>Electricity and heating usage</i>	
<i>Waste removal costs</i>	
<i>Renewable energy usage</i>	

Question 13 of the current survey asks:

“Have you identified any business risks that CSR has helped your business address? (e.g. low staff retention, risky suppliers)”

This question asks about the direct benefits to a company of its own CSR programme. However, the question could be improved in order to obtain more information and ensure that that information is comparable across companies.

One way to elicit additional information from individual companies is to provide in the question a more comprehensive list of known CSR benefits, such as staff retention. Companies could then be asked to ‘tick’ all benefits that are applicable. Adding a much larger set of potential benefits to the question and only requiring a yes or no answer transfers some of the effort from the respondent (who originally had to think of all the potential benefits) to HoTC, making it more likely that respondents complete it.

The question could further be improved by asking companies to quantify the benefit of addressing the business risks identified. For example, improved staff retention should reduce hiring costs and there may be a link to improved staff morale. Some companies will be able to quantify these benefits easily, for those that cannot it may be worth illustrating how they could estimate a benefit. For example, to calculate the direct benefit of lower staff turnover firms need to know how many fewer new employees they have had to recruit, and how much they spend on average recruiting someone.

An improved format for this question could be:

*Q. Have you identified any of the following business risks that CSR has helped your business address?
(please tick all that apply)*

	NO	YES		Answers (units in brackets)
<i>Low staff retention</i>			<i>What was your staff turnover in the last 12 months?</i>	<i>(per cent of staff)</i>
<i>Risky suppliers</i>			<i>How many of your suppliers would you deem risky?</i>	<i>(number)</i>
<i>Improved staff morale</i>			<i>Do you have a staff morale survey? If so, what was the outcome relative to the last year?</i>	<i>(average answer, indicate units)</i>
<i>Improved business brand</i>			<i>[eg brand recognition / association with positive indicators]</i>	
<i>Obtained new contracts</i>			<i>How many new contracts did you obtain in the last 12 months?</i>	<i>(number of contracts)</i>
<i>Industry recognition</i>			<i>[eg association with positive indicators]</i>	

* It may be difficult to quantify the exact saving to your business so don't worry about being exact. But you may find it helpful to break the question down. For example if you have improved staff retention please consider how many fewer employees you have hired this year, and the average company spend on hiring a new recruit.

Annex: Questions currently asked by HotC in the Graduation Survey (2014)

Below we detail current questions and comment on how these might be improved to support future data collection. Some of the questions do not relate to measuring the impact of HotC but how companies rate the charity. We would encourage that these are asked separately in future so as to keep the survey short.

<p>Company Name / Your full name</p> <p><i>Useful to track the company over time</i></p>
<p>Please select the borough in which your business is based</p> <p><i>This is a useful control variable. Use this to identify other businesses in the same area to approach and ask questions about volunteering/energy reduction/CSR budgets etc.</i></p>
<p>Please select your sector from the drop down menu</p> <p><i>This is a useful control variable. Use this to identify other businesses in the same sector to approach and ask questions about volunteering/energy reduction/CSR budgets etc.</i></p>
<p>Please indicate the size of your business by ticking the appropriate box below.</p> <p><i>This is a useful control variable. Use this to identify other similar sized businesses to approach and ask questions about volunteering/energy reduction/CSR budgets etc.</i></p>
<p>How many staff (excluding volunteers) in your organisation are dedicated to CSR full time or part time? Please enter zero if none.</p> <p><i>This could provide more useful information if the question is asked of many more companies both those in contact with HotC and those that are not.</i></p>
<p>Please indicate the size of your CSR budget in pounds (not including cash/in-kind donations). Please record your response in the box below to the nearest whole number. Please do not use any commas or decimal points. If you cannot state an exact figure, please give your best estimate.</p> <p><i>This question will be useful to establish the impact of the program if there is an adequate control group and the participating companies answer the questionnaire before and after the program. One answer option should be "Don't know" in order to distinguish companies who did not have a budget from those who don't know what it was.</i></p>
<p>Does your business have a charitable foundation*?</p> <p><i>This question on its own does not establish if involvement with HotC led to a charitable foundation being established. In order to assess whether a charitable foundation was set up as a result of HotC, data for control and treatment groups is required, including before and after HotC's involvement.</i></p>
<p>What is the focus of your foundation's work?</p> <p><i>This question will help qualitatively assess what types of charities are beneficiary of the CSR spend. However, giving set response options may help with comparisons across different firms rather than let firms describe on their own.</i></p>

<p>The following are common challenges that Newcomers may face when developing a CSR programme. Please rank the challenges you faced in the last 18 months when developing your CSR programme regardless of whether you overcame the challenge, where 1 is the most challenging, 2 is the second most challenging and so on. If an item is not a challenge at all, please select 'N/A'.</p> <p><i>This is not necessary for the purpose of conducting an impact evaluation. It may be useful for other purposes though – so could be asked separately.</i></p>
<p>Please consider each of the following potential business benefits of developing a CSR programme.</p> <p>Please consider which business benefits you experienced as a result of developing your programme.</p> <p><i>The options should link to measureable outcomes you are interested in. For example “attracting new and/or existing clients”, ask for the number of clients in a given year. Then, using the control group and the question, it will be possible to see whether the number of clients has increased as a result of HotC</i></p>
<p>Please rank the benefits in order of those you experienced, where 1 is the greatest benefit, 2 is the second greatest benefit and so on. If the possible business benefit is not perceived to be a benefit for your organisation or is not a benefit you experienced, please select 'N/A'.</p> <p><i>It is more useful to have information about how much of a benefit each of these was. For example, rather than ranking options ask for the direct benefit of each. (e.g. amount that energy bills have been reduced in £, reduction in staff turnover rate in per cent etc).</i></p>
<p>Please provide any other business benefits that your organisation has experienced as a result of your CSR programme.</p> <p><i>Leave space for a single catch all qualitative question at the end.</i></p>
<p>Have you identified any business risks that CSR has helped your business address? (e.g. low staff retention, risky suppliers)</p> <p><i>Again, it is important to target the outcome. For example, to measure the impact on staff retention, ask for the share of staff leaving in a given year. Leave a section for comments to identify potential benefits that could be measured in the future.</i></p>
<p>What were your top three CSR achievements in the last 18 months?</p> <p><i>Quantitative questions are often more useful for impact analysis. Therefore ask about quantifiable outputs from the programme. For instance, following the illustrative example, number of children mentored and how they performed in school</i></p>
<p>Please indicate which of the following aspects of a community programme you have put in place or further developed within your organisation in the last 18 months. Below are some definitions that may be helpful.</p> <p><i>Answers need to clearly link to a measurable outcome of interest</i></p>
<p>Thinking about all of the community support provided by your organisation, how is this distributed proportionally across the following areas? Please provide your best estimate and ensure your proportional breakdown totals to equal 100%.</p> <p><i>Useful descriptive question</i></p>

<p>How many community partners* in the UK have you worked with in the last 18 months?</p> <p><i>No clear link to a measurable outcome</i></p>
<p>Where are the majority of your community partners based?</p> <p><i>No clear link to a measurable outcome</i></p>
<p>Please provide the number of hours' time off allowed for volunteering during work time per member of staff (UK) per annum. If the number of hours vary, please provide an average. If you do not allow time off for volunteering, please input 0</p> <p><i>Data for control and treatment groups is needed, and both before and after HotC's involvement to use the results from this question.</i></p>
<p>Please indicate the proportion (percentage) of staff who undertook volunteering during work time within the last 18 months (volunteering in the UK only).</p> <p><i>Data for control and treatment groups is needed, and both before and after HotC's involvement to use the results from this question.</i></p>
<p>Please indicate the number of work experience/apprenticeship placements your organisation has offered to socially disadvantaged candidates within the last 18 months. If you offered none, please enter 0.</p> <p><i>You will need data for control and treatment groups, and both before and after HotC's involvement to use the results from this question.</i></p>
<p>What is the average length of these placements in weeks?</p> <p><i>This may be useful information but only partially captures how useful the placement has been for either the firm or the individual.</i></p>
<p>Please indicate the total amount your organisation has provided in UK charitable cash donations over the last 12 months. This will include company donations, corporate amount of matched giving, and staff fundraising for corporate charity partners. Please record your response in the box provided. Please record your response to the nearest whole number. Please do not enter any commas or decimal points. If you cannot state an exact figure, please give your best estimate.</p> <p><i>This could be interpreted as an outcome, although it is not possible to measure social impact from this alone. Also, you will need data for control and treatment groups, and both before and after HotC's involvement to use the results from this question.</i></p>
<p>Please provide a case study which demonstrates the ways in which your company is making a difference to the community. We may use this for our website and/or newsletter. This should include -- (1) a description of the activities undertaken with your community/charity partner (if applicable) (2) the impact of this project on your community/charity partner (quantitative and/or qualitative impacts) and (3) the business benefit of embarking on the project (can include quotes from charity and/or company).</p> <p><i>As a qualitative question, this is not directly useful for impact evaluation but it may have other uses.</i></p>

<p>Please indicate which of following aspects of an environment programme you have put in place or further developed within your organisation in the last 18 months.</p> <p><i>Again, use outcome variables. For example, ask companies for their estimated energy expenditure/water expenditure/waste removal expenditure/carbon emissions in the last year</i></p>
<p>Have you experienced cost savings as a result of your environmental programme in the last 18 months? If so, please record your response in the box below to the nearest whole number. Please do not use any commas or decimal points. If you cannot state an exact figure, please give your best estimate.</p> <p><i>This will not be needed if previous question is tailored to ask for measurable outcomes</i></p>
<p>Do you measure your carbon footprint*? If so, please indicate by how much it has reduced in the last 18 months. Please record your response in the box below to the nearest whole number. Please do not use any commas or decimal points. If you cannot state an exact figure, please give your best estimate.</p> <p><i>This will not be needed if previous question is tailored to ask for measurable outcomes</i></p>
<p>Please indicate which of the following aspects of a workplace programme you have put in place or further developed within your organisation in the last 18 months.</p> <p><i>Example of measurable outcomes: actual staff satisfaction survey results, diversity statistics, percent of senior staff engaged</i></p>
<p>Please give examples of any innovative wellbeing initiatives (physical, social, psychological) that you have put in place.</p> <p><i>As a qualitative question, this is not directly useful for impact evaluation but it may have other uses.</i></p>
<p>Please give examples of any innovative initiatives you have put in place to encourage diversity in your workforce* at all levels of seniority.</p> <p><i>As a qualitative question, this is not directly useful for impact evaluation but it may have other uses.</i></p>
<p>Please indicate which of following aspects of a marketplace programme you have put in place or further developed within your organisation in the last 18 months.</p> <p><i>Link this question much more directly with outcomes of the programmes (i.e. cost savings etc).</i></p>
<p>Please indicate the proportion (percentage) of your suppliers in your supply chain which are locally based (e.g. London), green or minority owned. Please provide your answer as a whole number. If you have no suppliers in these categories, please input 0.</p> <p><i>This will be useful if combined with information about approximately how much is sourced locally in £ terms</i></p>
<p>Which one of the following options best describes your CSR programme at this time?</p> <p><i>Should be asked separately, not for the purpose of conducting an impact evaluation</i></p>
<p>Please rate the following aspects of Heart of the City's Newcomers programme.</p> <p><i>Should be asked separately, not for the purpose of conducting an impact evaluation</i></p>

<p>Please rate the following aspects of our website on the following scale</p> <p><i>Should be asked separately, not for the purpose of conducting an impact evaluation</i></p>
<p>Please provide any recommendations you may have for improvement to Heart of the City's services.</p> <p>Heart of the City offers continued support in developing your CSR activities through our Alumni membership programme. Please indicate below if you are interested in our Alumni services.</p> <p><i>Should be asked separately, not for the purpose of conducting an impact evaluation</i></p>
<p>Are you considering applying for a Dragon Award? If so, please indicate in which year you are considering applying. We can help ensure you receive the relevant information, including deadlines and details on application writing workshops.</p> <p><i>Should be asked separately, not for the purpose of conducting an impact evaluation</i></p>

Appendix: additional information and resources

[Inspiring impact](#)

Free online tool for assessing your impact evaluation practices. The Impact Hub has resources for data collection and visualisation.

[NPCs Building Your Measurement Framework](#) by Kazimirski A. and Pritchard D.

This report provides guidance on developing a framework for impact assessment, tailored to charities.

[Social Impact Measurement: Classification of Methods](#) by Maas K. and Liket K.

A paper summarising a number of different approaches charities have used for impact assessment

[Mentoring Evaluation](#) by Parsons C. et al

Example of an impact evaluation study done on a mentoring scheme. The annex contains the survey used in the study.