

BIS | Department for Business
Innovation & Skills

**GUIDANCE FOR USING
ADDITIONALITY BENCHMARKS IN
APPRAISAL**

DECEMBER 2009

Guidance for Using Additionality Benchmarks in Appraisal

1. Introduction

Project appraisal incorporates a number of areas (as set out in HMT's green book) including ensuring that options for interventions are assessed taking into account the additional benefit that they would achieve, over and above a default or reference case. This is referred to as additionality.

In 2004 English Partnerships¹ produced guidance on assessing additionality which contained ready-reckoners for making estimates on the magnitude of these effects. RDAs have used this to date as the basis for their assessments in this area. However, in October 2009 the department for Business, Innovation and Skills (BIS) published work on additionality undertaken by Cambridge Economics Associates (CEA)². This paper contains statistics drawn from 280 evaluations of projects and programmes carried out across the UK and used these to develop benchmarks for the key components of additionality for different intervention types. These benchmarks can be used to inform future project appraisal and to act as a sense check on future evaluation work.

This document is aimed at programme and project SROs³ and appraisal practitioners and provides guidance on how and when the CEA benchmarks on additionality should be used in project and programme appraisal, including a worked example⁴. It should be noted, however, that the overall approach to additionality outlined in the EP document should still be followed, and that this note constitutes best practise towards additionality. It is predominantly for the use of RDAs however sections may be applicable more widely, where projects are appraised at a regional level.

In line with the national framework, further guidance will be issued to give direction for projects taken forward under national projects with wider spatial implications, as set out in the Partnerships for Growth document⁵.

2. Overview of Additionality

The consideration of additionality is an important part in ensuring that option appraisal is realistic in its prediction of net benefits from the intervention. Additionality can be split into 5 key components, each briefly described in the box below.

¹ English Partnerships *Additionality Guide*

<http://www.englishpartnerships.co.uk/communitiespublications.htm>

² BIS Occasional paper No.1 *Research to improve the assessment of additionality*

<http://www.berr.gov.uk/files/file53196.pdf> (Found in economics analysis publications, occasional paper section of the BIS website.)

³ Senior Responsible Owner

⁴ Guidance on the use of benchmarks in evaluation is contained in IEF+ 'RDA evaluation: practical guidance on implementing the Impact Evaluation Framework'

⁵ Partnerships for Growth; a National Framework for Regional and Economic Development

<http://www.berr.gov.uk/files/file53941.pdf> (Found in Regional Economic Development section of BIS website.)

Additionality

While a longer explanation of each element of additionality is discussed in detail within the CEA research paper and English Partnerships additionality guide, a brief outline of each is set out below.

Deadweight measures the proportion of the final outcome of a project which would have occurred without government intervention. In some cases this is quite large, and is often the most important of the assumptions due to its size.

Displacement is the extent to which intervention in one area reduces economic activity in another. Appraisal and evaluation is only concerned with displacement from other areas of a target region.

Leakage is identified as benefits which accrue to areas outside the target area of the intervention.

Substitution exists where there is a shift in economic activity to a similar alternative in order to take advantage of public sector intervention. This may result in losses arising from the change in behaviour of firms and individuals. For example a firm may hire a new employee to replace an existing one to take advantage of government funds.

Multipliers measure the degree to which government intervention 'ripples' out into the economy, through the spending of employees associated with the project and the increase in orders received by suppliers to businesses benefiting from the project.

3. CEA method and figures

The figures contained within the CEA paper are taken from their analysis of 280 past evaluations undertaken by RDAs, Scottish Executive and Government Departments. Data was taken from these evaluations for all categories of additionality, disaggregated into three key themes (business development, physical infrastructure and people & skills).

The size of the CEA dataset allowed them to break down the themes into further sub-themes, giving specific additionality figures for each of these⁶, however some of these lack enough observations to give a credible figure.

⁶ These themes and sub themes are set-out and explained in Figure 2.3, page 10, of the *Research to improve the assessment of additionality* paper.

Multipliers

The multipliers given in the CEA paper *are not* a percentage – they are an actual value. This means they can be used in calculations without making any changes to them. The confidence intervals given *are* a percentage, as opposed to the other factors given which were percentage points. To calculate the confidence interval for these figures requires taking the mean value and adding and subtracting a given percentage:

Taking the theme 'business development & competitiveness', the mean multiplier is 1.51 which with a confidence level of 4.3 gives a confidence interval of:

$$1.51*(1-0.043) = 1.45$$

$$1.51*(1+0.043) = 1.57$$

The confidence interval is 1.45 to 1.57

4. When to use them

4.1. Outline to approach

Additionality should always be considered in project appraisal, but the extent to which it is analysed should reflect the size of the project or programme. The ideal approach would be to use project specific data to assess additionality; however this cannot be justified for every project. Often the size of the project means this is not proportionate, and it may be that there are similar projects (within or outside the region) which will give applicable figures to be used in the appraisal. Wherever the values are drawn from (and this should be given) the numbers should be compared with the appropriate CEA tables and explanations offered for differences, the extent of this evaluation should be proportional to the size of the project or programme.

4.2. Finding the appropriate figures from the CEA paper

The first step towards establishing additionality figures to use in project appraisal should be to ascertain the appropriate benchmarks in the CEA paper. This involves determining which theme the proposed intervention falls into and looking up the mean additionality figures for this intervention type. The confidence figures give an indication of how broad the benchmark value is; the higher the confidence interval the larger the benchmark band.⁷

Sub-themes should only be used if there are enough observations to give a reliable mean and it is most applicable to look at the intervention at this level.

⁷ In this context the confidence levels indicate the spread of results i.e. the percentage above and below the mean value within which 95% of the observations are expected to fall. The higher this value, the more variability there is within the sample data. Evidence of the sort used in the CEA work has not been collected systematically before. It is thus not possible to know the true population of additionality evidence and how representative the 280+ evaluations are. However, it is felt that the evidence provides some approximate benchmarks with which to compare the results for different intervention types when used alongside other evidence.

For example, the sub-theme ‘support for internationalisation of business’ has 6 observations, indicating the mean value may be unreliable, the theme under which it falls – business development – should be used instead. However the promotion and development of science, R&D and innovation infrastructure, with 64 observations, would be an appropriate sub-theme to use.

The sub-themes and themes cover most potential types of intervention. In the rare cases that projects fall outside of these themes appraisers may be able to justify using project specific data alone.

4.3. Identify other evaluations which may be relevant to the proposal in question

If the intervention is significant and it is proportionate to do so appraisers may also look for specific additionality evidence on projects that are particularly similar to that being considered as these may provide more appropriate information than the CEA benchmarks. The OffPAT e-library on evaluation provides a starting point for obtaining this information.⁸ Where other information is used in this way, practitioners will need to be confident that this does indeed represent an improvement on the CEA figures and the reasons for this are clearly set out.

4.4. Use project specific data

Similarly if there is the opportunity to get project specific data (e.g. through a project pilot) this information can be used either in preference to the additionality benchmarks (if sufficiently robust) or to modify them. For example if there is good evidence that a new approach on a particular project may reduce leakage by 10% over similar projects, the additionality assumptions can be tailored accordingly.

4.5. Comparison of additionality levels

If the size of the project has justified collecting specific data, the final step should be to compare this with the benchmarks. This will give the opportunity to show where the project is stronger than average and also highlight where it is weaker. This discussion should reflect the size of the intervention, with larger interventions going into more depth about the reasons for the given levels of additionality.

5. Conclusion

Clearly, using the best possible assumptions about the additionality of a particular intervention will lead to the most accurate appraisal. However data on the additionality of an individual intervention is not available at the point where the decision to proceed is taken and appraisers need to rely on data from other sources. The CEA benchmarks provide a source of information for RDAs appraisal practitioners to use where project specific data is not available. Depending on the scale and importance of the intervention further data can also

⁸ www.offpat.org/readingroom

be sought to use alongside or in place of the CEA figures, where they will facilitate discussion on the additionality performance of particular projects.

ANNEX: Brief numerical example

To demonstrate how the benchmarks should be used to check the use of additionality data, an example is outlined below.⁹

The example assumes an intervention is proposed to improve SME's access to finance, which they would otherwise have been unable to obtain. It is expected that without the intervention the SMEs in the target area would create 35 additional jobs over the next 2 years.

Access to the funding is expected to increase this to 90 new jobs within the 2 year time period. This gives the reference case of 35 new jobs and the preferred intervention case of 90. The RDA was able to commission research for the project which led to project-specific data for displacement, substitution and multiplier estimates, while the leakage figure is drawn from a similar access to finance project in another region.

	Reference Case	Intervention	Benchmark Figure	Benchmark confidence level (percentage points)	Benchmark confidence interval
Gross employment	35	90			
Deadweight	35 Jobs	38.9%	47.3%	3.7	43.6% to 51%
Leakage	7.0%	7.0%	12.9%	6.2	6.7% to 19.1%
Displacement	24.0%	24.0%	30.8%	4	26.8% to 34.8%
Substitution	3.0%	3.0%	6.2%	5.3	0.9% to 11.5%
Multiplier	1.3	1.3	1.44	3.5*	1.39 to 1.944
Net employment	31	80			
Net additional employment		49			
Net additionality ratio		61%	58.30%	9.5	48.9% to 67.9%

* The confidence level for the multiplier is given as a percentage rather than percentage point.

Step 1

The gross employment in the reference case can be compared to that of the intervention, giving the deadweight estimate of 38.9% as the proportion of jobs created which would have been created without intervention (35 divided by 90). This compares to a deadweight benchmark of 47.3% (+/- 3.7) suggesting that the project will have a lower deadweight than the national average for access to finance projects. The appraisal should explain why this project is expected to create more jobs than the national average for this type of intervention, to give support to the use of the figures. In this example the deadweight is a result of predicted jobs, so the reliability of the figure rests on the quality of this data.

⁹ For a full exposition of how to calculate additionality effects, see the English Partnerships note referenced above, chapter 5.

Step 2

Taking the employment figures as given, the next step is to calculate leakage, displacement, substitution and multiplier effects on this. The project specific figures obtained are consistently below those of the benchmarks, suggesting this project has higher levels of additionality than other projects of the same theme. Variation is to be expected; the benchmarks mask differences between outcomes from interventions. Attempts should be made, however, to explain why these project specific figures are lower than the benchmarks. The displacement figure falls below that of the confidence interval around the benchmark, and would require relatively more justification for its use. With respect to the leakage figure, where data is drawn from previous evaluations, the similarities between this project and the project which generated the figure should be given.

Step 3

The next step is to calculate the net additional jobs from the gross jobs given. To do this the additionality estimates are applied to the gross jobs number, the equation for which is below:

Jobs created x (1 – leakage) x (1 – displacement) x (1 – substitution) x multiplier

Reference case:

$$35*(1-0.07)*(1-0.24)*(1-0.03)*1.3 = 31$$

Intervention:

$$90*(1-0.07)*(1-0.24)*(1-0.03)*1.3=80$$

The reference case jobs, adjusted for additionality, should then be subtracted from the net jobs created by the intervention which will give net additional jobs, a key metric for assessing the additionality of a project.

The above work through represents the preferred approach to assessing additionality and comparing the effect of project specific additionality figures with BIS benchmarks. The approach can be used not just for jobs created, but also for floor-space, GVA and other outputs being converted from gross to net.

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