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Citation: Potts D (2008) Assessing the impact of regeneration spending: lessons from the United Kingdom and the wider world. *Education, Knowledge and Economy*. (2)3: 213-222.

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Assessing the Impact of Regeneration Spending: Lessons from the UK and the Wider World

David Potts
Bradford Centre for International Development

Introduction

Social enterprise is an important element in current regeneration strategy, particularly in relation to employment generation and the development of marketable skills. This paper investigates the methods currently used in the UK to assess whether the cost of regeneration expenditure is justified by its impact and considers alternative approaches developed in different but potentially relevant contexts. It starts off by briefly examining the significance of regeneration spending in relation to public expenditure in general and incomes of the populations affected. It then looks at current Treasury guidance on the appraisal and evaluation of public expenditure as reflected in the Green Book and the interpretation of this guidance in documents produced by or for other public sector organisations in the UK. Other approaches put forward for similar purposes are then considered, particularly SROI and LM3.

Having considered current practice in the UK, the paper then goes on to ask whether there is anything to learn from approaches used in the appraisal of projects in developing countries and in the wider literature on the appraisal of environmental impacts and the benefits derived from higher education and training.

In considering approaches derived from literature elsewhere a significant issue is the language used to describe different terms and concepts. It is quite striking how different the language used in the current analysis of UK public expenditure is when describing the same or similar concepts that have been used for many years, particularly in development economics.

Regeneration Spending – Purpose and Scale

In 2007/8 the government announced funding for the RDAs of £2.3 billion (HM Treasury 2007: 27). Although government spending on regeneration is fairly small as a proportion of total GDP and public spending (approximately 0.2% of GDP and 0.5% of public spending) it is still significant in relation to the areas covered – the 10% most deprived wards in the country. This spending could possibly represent about 5% of the income of those wards. Government regeneration spending is also used as leverage for funds from other sources. Thus Rhodes et al in their final evaluation of the Single Regeneration Budget state (p. ii) that “*approximately £5.7 billion of SRB has been associated with a total regeneration spend of £26 billion.*” The economic significance of regeneration spending may therefore be greater than the size of government spending – as indeed it is intended to be.

The stated purpose of the spending is to reduce disparities in income and ensure that “*there is opportunity and security for all*” (HM Treasury 2007: 14). There is therefore a clear redistributive element in the rationale for regeneration spending although it is also clear that it is intended to contribute to economic growth and is therefore supposed to be justified at least partly on economic efficiency grounds.

A more specific identification of the drivers of deprivation identifies three main factors that need to be addressed. These are:

- a) A weak economic base particularly in relation to the skill base and business support facilities;
 - b) Poor housing and social environment; and
 - c) Poorly performing public services
- (ibid p. 17)

In principle therefore both appraisal and evaluation of regeneration activities should be based on the extent to which it is able to make genuine improvements in these areas at a cost that can be considered to give value for money. The important question is how to evaluate the benefits in a way that allows value for money to be assessed. It is therefore worth considering what the benefits are.

Regeneration Benefits

Regeneration benefits can be considered on the basis of the immediate outputs of the activity and on the wider impact that those outputs have both directly on the welfare of the primary beneficiaries and indirectly on the wider local, regional and national economy.

An important question in determining impact is what the Treasury refers to as 'additionality'. This term covers what those more used to project analysis outside the UK would recognise as the difference between what is expected to happen with the project and the 'without project' counterfactual and it can also be seen as an aspect of what might more generally be seen as taking account of the opportunity cost of a proposed course of action. What is important in the analysis of any intervention is to establish the difference between what is expected to happen with the project and what would have happened without it. This is particularly important in relation to the creation of new jobs since a proportion of those obtaining work as a result of regeneration schemes would probably have found work even if the scheme had not taken place.

Four elements in determining the counterfactual aspects of additionality are mentioned in the Treasury Green Book (p.53). These relate to 'leakage', 'deadweight', 'displacement' and 'substitution'. Leakage is particularly relevant to regeneration projects since it relates to leakage of benefits outside the spatial area that is being regenerated. In the analysis of the national impact of regeneration projects it is not obvious that these benefits should be excluded as long as the benefits remain within the economy since they might simply accrue to other relatively deprived areas or be the result of someone from a deprived area being able to move out. If we are concerned about benefits to people as much as areas we should take these benefits into account even if they are not the primary purpose of the project.

Deadweight is the pure without project case most easily represented by instances where jobs would have been gained without the project. Displacement and substitution relate to cases where a regeneration project competes with other parts of the economy for scarce resources or leads to substitution of other activities. This is an important issue where claims of multiplier effects are made. Such effects only occur if they lead to greater use of underutilised resources rather than competing claims on scarce resources.

An important issue in the evaluation of regeneration projects is the question as to whether any attempt should be made to estimate a money value for the benefits. It could be argued that it is only when such a value is placed on the benefits that it can really be established whether the expenditure represents value for money. The counter arguments are

- that the benefits of regeneration projects are so diverse that it is too difficult to put money values on them or
- that individual regeneration projects are so small that attempts to estimate money values for the benefits would increase the cost of the process of appraisal/evaluation beyond what could realistically be afforded.

To assess these arguments this paper considers first what the Treasury Green Book recommends and then what appears to be current UK best practice as reflected in the SRB/NDC Guidelines, other related publications and the major evaluation report undertaken on the Single Regeneration Budget (SRB)

Guidance from the Government on Appraisal and Evaluation

There are quite a lot of sources of guidance on appraisal and evaluation from different government agencies. A brief review of some of what some of these sources have to say on measurement of benefits is set out below:

The Treasury Green Book

According to the Treasury 'Green Book' guidance on public investment (p.21) *"The general rule is that benefits should be valued unless it is clearly not practicable to do so" and "...in principle, appraisals should take account of all benefits to the UK."*

It also states (p.22) *"Where it is concluded that a research project to determine valuations is not appropriate, a central estimate, together with a maximum and minimum plausible valuation, should be included. These figures should be included in sensitivity analyses to give assurance that benefit valuation is not critical to the decision to be made."*

The implication is that wherever possible some attempt should be made to value benefits and that, even for small projects where the cost of a research study cannot be justified, there should at least be some attempt to indicate a range of values. Of course this raises the questions as to where to get the information to make such estimates and why valuation of benefits is important.

The Green Book does not specifically state whether it expects the value of regeneration project benefits to be estimated but it does define the likely objectives in terms of *"improvements in one or more of the following:*

- *Labour supply and skills;*
- *Quality of life;*
- *Physical environment; and,*
- *Local business opportunities" (p.55)*

....and suggests that likely *"regeneration outcomes might include:*

- *Reductions in crime;*
- *Improvements in the capacity of community organisations; or,*
- *Increases in local incomes and employment." (ibid)*

The major argument for estimating the value of the benefits of regeneration projects is to ensure that public funds are used for public benefit and provide good value for

money, not just in the narrow sense of making a profit for a particular organisation but in the wider sense of improving the livelihoods of target populations. While it is reasonable to want to know what the benefits of regeneration spending are an important question is whether it is realistic to attempt to put a value on such benefits in either appraisal or evaluation.

SRB Guidance Manual (2003) and the '3Rs Guide' (2004)

The SRB Guidance Manual does not state specifically whether the benefits of regeneration projects should be valued but it does state (Chapter 3):

"All projects must be subjected to proper appraisal and approval before any expenditure is incurred. The appraisal should be commensurate with the size and complexity of the project, and should include checks on the accuracy of the information supplied. For a complex project with multiple inputs and outputs and operating over several years, the project appraisal will need to be detailed and full attention will need to be given to economic (option) appraisal. For a small project designed to produce one kind of output, or which replicates tried and tested projected activities, the appraisal can be less detailed." (pp.37-8)

The implication is that valuation of benefits for the appraisal of individual small projects is not required but that it may be necessary for larger projects. It could also be argued that where a project replicates a tried and tested approach benefits could be imputed on the basis of experience elsewhere.

The '3Rs Guide' has a comprehensive appendix on measurement of outcomes covering a number of important issues but the guidance on valuation is fairly minimal. As with the Green Book lip service is paid to the desirability of valuation of the benefits but the difficulties are perceived to be significant.

"Problems of identifying, measuring and valuing benefits arise with appraisal and evaluation of many government interventions, but they tend to be relatively severe in relation to the 3Rs." (p.113)

"Ideally outputs and outcomes should be valued in money terms where possible. In the presence of multiple outcomes, valuation is especially desirable. Where valuation is not possible assessments should identify how best to quantify the impact and to identify priorities among the outcomes. Where preferences can be expressed in terms of weights, guidance on the use of multi-criteria approaches should be followed." (p.126)

English Partnerships Additionality Guide (2004)

The Additionality Guide refers to both the Green Book and the 3Rs Guidance in arguing that:

"Project appraisal entails being clear about objectives, thinking about alternative ways or options of intervening to meet them, estimating and presenting the costs and benefits of each potentially worthwhile option and taking full account of associated risks....."

Central to good appraisal is the need to assess whether the project concerned will bring additional benefits over and above what would have happened anyway in its absence." (p.1)

The Additionality Guide provides clear and comprehensive guidance on the calculation of additionality in terms of measurement outcomes but it has nothing to say on the issue of estimating the money value of those outcomes. A wide range of further guidance based on available research is also available from English Partnerships, much of which could provide useful information for imputing the value of regeneration outcomes.

DTI Occasional Paper No. 2 (2006)

The DTI engaged consultants to develop a methodology and evaluation framework for evaluating the impact of the English RDAs. In this document evaluation of outcomes was considered in relation to three aspects, namely business development and competitiveness, infrastructure development, and development of human resources. Again there is much relevant advice on indicators of potential outcomes but very little indication that these could be valued although in the section relating to human resources Keep, Mayhew and Corney's (2002) review of the relationship between skills and productivity is referred to as evidence of the lack of reliable evidence on the size of returns to *employers* from training. However it should be noted that the benefits from training do not just accrue to employers and in the case of regeneration projects it is the benefit to the *employees* that is most likely to be important.

ODPM 'Exploratory Assessment'

In 2006 the ODPM produced an extensive theoretical review of the case for regeneration investment. This review examined the various arguments and, based on the logic of these arguments, put forward a number propositions on policies that would deliver national economic benefits from regeneration expenditure. Although the review did discuss the guidance provided by the Green Book and by English Partnerships on appraisal of the additionality of regeneration projects and recognised the inherent limitations of an area focussed analysis in assessing national economic benefits, it did not come to any conclusions on what form of appraisal was appropriate and concentrated mainly on the macroeconomic arguments for particular policy approaches.

Evaluation of the Single Regeneration Budget

The most extensive piece of evaluation work on the impact of regeneration interventions is the review of the SRB conducted from the Department of Land Economy at Cambridge University (Rhodes et al 2007). This review put together a substantial body of evidence on the impact of regeneration schemes coming under twenty case study partnerships and involved a very thorough analysis of the additionality of the outcomes of the various schemes covered by the study. A cost effectiveness approach was taken to the study and outcomes were measured in terms of indicators such as jobs created or safeguarded, enhanced pupil attainment, personal development of young people and community safety initiatives. These indicators were related to units of £20,000 of expenditure and judgements on value for money were made on the basis of what £20,000 of regeneration expenditure could deliver. The study concluded that "*SRB has been a relatively cost-effective area based initiative*" (p.xi). This appears to be a valid conclusion if a cursory inspection of the potential value of the outcomes is compared with the cost of the interventions, however no attempt was made to make even a rough valuation of the benefits.

What is striking about all of the above sources is not only the fact that there appears to be no real attempt to get even a rough valuation of the benefits but there is not a great deal of discussion as to why there should not be other than the general point that regeneration benefits are diverse and often difficult to measure. This would be more understandable if there were some reason to believe that regeneration expenditure could only be justified on social and redistributive grounds. However the evidence presented in Rhodes et al suggests that there are actually very real benefits resulting in genuine supply side effects in terms of increased employment and improved skills as well as significant environmental benefits. So why no attempt to value them?

One organisation trying to provide such evidence is the New Economics Foundation.

New Economics Foundation (NEF) Approaches

Two specific approaches to demonstrating the economic value of regeneration expenditure have been put forward by the NEF. These are 'Social Return on Investment' (SROI) and Local Multiplier 3 (LM3). A brief outline of these approaches and their advantages and limitations is set out below:

SROI

SROI was developed by the Roberts Foundation in San Francisco in the mid-1990s to provide a method for doing cost benefit analysis for social purpose enterprises. The approach essentially involves trying to take account of the indirect benefits arising from things like savings in public expenditure and increased earnings from employment. Case studies of the approach in the UK do not go beyond the first round effects of the projects, a factor that may tend to understate social returns, but they also tend to make rather optimistic assumptions about the additionality involved with rather low assumptions about deadweight and displacement effects. In principle what it is trying to do could provide valuable evidence of value for money but a more careful use of assumptions is required to give greater credibility to the results.

LM3

LM3 (Sacks 2002) is an approach to try to capture local multiplier effects by tracing the proportion of regeneration expenditure that is spent on procuring local goods and services and then trying to identify the local value added involved in this expenditure. It is essentially a localised version of the traditional Keynesian multiplier and makes the same implicit assumption of the existence of underutilised resources. While this may be true of certain categories of labour costs it takes no account of potential substitution effects. By concentrating on the local area it also does not take any account of benefits created outside the target area. It is therefore not a very reliable indicator of the economic merits of specific interventions although it might give local authorities a better idea of what sorts of activities are most likely to minimise leakage from the local economy.

LM3 could also generate useful information for a more comprehensive economic analysis of regeneration activities using cost benefit analysis and some of the concepts commonly used in development economics, environmental economics and the economics of education. In particular it has the potential to identify possible indirect employment effects derived from the procurement of the goods and services used by regeneration projects. Such information could potentially enhance the use of SROI.

An Alternative Approach – Selective Use of Cost Benefit Analysis

It has been argued above that existing practice in the appraisal and evaluation of regeneration projects has provided some valuable guidance on the estimation of additionality measured in non-monetary terms but has failed to provide clear evidence that the benefits of regeneration expenditure exceed the costs although the results of the SRB evaluation study suggest that this may well be the case.

The Green Book suggests that the major benefits of regeneration stem from improvement of the labour supply leading to increased employment and better skills, improvements in the quality of life and the physical environment and improvement of local business opportunities. In principle it is possible to measure and value many of these outcomes. Such estimates could be used to confirm (or refute) the supposition that regeneration expenditure provides good value for money and also to identify the kind of activities that provided the greatest benefits. Even if detailed analysis is only conducted for a relatively small proportion of the projects funded it may be possible to use the results to impute estimates for a larger number. It should at least be possible to get a rough idea as to whether the benefits justify the costs.

Three approaches will be considered below. The first is derived from the analysis of projects in the context of a labour surplus economy. The second is the analysis of the benefit of investment in skills and education using human capital theory. The third is the use of hedonic methods and contingent valuation in environmental economics.

Analysis of Job Creation in a Labour Surplus Economy

Methods of project analysis adopted in developing countries in the last forty years have had to take account of the existence of significant levels of unemployment or underemployment. This is reflected in the methodologies put forward by the main international development agencies (e.g. Little and Mirrlees 1968 and 1974, UNIDO 1972 and 1978,) as well as in the guide developed for the UK Overseas Development Administration (now DFID) (ODA 1988). It was argued that, due to a number of factors including the existence of minimum wages, trade union activities and the sharing of labour by families, the opportunity cost of unskilled labour was below the market wage. In other words the creation of an extra job in the formal sector resulted in a loss of output of less than the wage paid to the labourer. In the terms currently used by the UK Treasury, the deadweight, displacement and substitution effects were less than 100% of the wage paid to the worker. These effects would be included in a single measure, described as a shadow wage rate, which could be applied to employment of the relevant category of labour in any projects in the area covered by the measure. In large countries regional estimates might be made to take account of regional differences in the relative scarcity of labour and distinctions could be made between different categories. For example, in a study in Ethiopia (Potts et al 1998) shadow wage rates for formal sector unskilled labour were estimated on a regional basis while in studies in Lithuania and Latvia (Potts 1995 and 1996) a distinction was made between unskilled labour and semi-skilled labour.

The idea of using a shadow wage rate in a developed country context is not unknown. Kirkpatrick and MacArthur (1990) investigated the case for using a shadow wage rate in Northern Ireland. Honohan (1998: 16-25) reported on the implicit use of a very low shadow wage rate by Irish industrial development agencies and argued that a rate of 80% of the market wage rate (i.e. combined deadweight etc. of 80%) would be appropriate. Florio and Vignetti (2004: 22-28) discuss the

inconsistent use of shadow wages in the context of EU Cohesion Fund projects and propose a more consistent approach (see also Florio 2006). Swales (1997) criticised the use of cost per job measures and argued for the use of a consistent cost benefit analysis approach including the use of a shadow wage rate. Similar issues are discussed in Wren (2005). Use of a shadow wage rate to put a value on the opportunity cost of non-scarce labour would allow a consistent approach to assessing the value for money of projects where job creation is a major objective. It would also allow a systematic approach to taking account of regional differences in labour scarcity since the shadow wage rate could be different in different regions. The approach has long been used by DFID and its predecessors in developing countries with far less capacity for research and planning than the UK. Why is it so difficult to use it in the UK?

Human Capital Approaches to Valuing Improvement in Skills

The idea behind human capital approaches to the valuation of benefits in education and skills training is that, in a reasonably competitive labour market for workers with marketable skills, the benefits of skill development can be estimated on the basis of the additional earnings once the skill has been obtained. While it cannot be claimed that this is a perfect measure of benefits it should be enough to obtain an order of magnitude and it is particularly relevant to the evaluation of interventions specifically oriented to tackling skills shortages where the purpose of the training is economic in its nature. A great deal of work internationally has been done by Psacharopoulos and various collaborators, particularly in developing countries. The important point here is that the benefit goes primarily to the person receiving the training so the point made by Keep, Mayhew and Corney about evidence of returns to employers from training may not be particularly pertinent. As with shadow wage rates this approach has been used in a number of studies in developing countries so why is it not possible to use it for the evaluation of skills development projects in the context of UK regeneration?

Environmental Valuation

Improvements in the environment may appear to be particularly problematic from the point of view of valuation. However the methods available for this are mentioned in the Green Book (Annex 2). These include revealed preference approaches and stated preference approaches.

Revealed preference approaches can be used to derive monetary valuations for environmental changes from surrogate markets. For example an environmental improvement could have an effect on property prices thereby raising the real wealth of the inhabitants of the affected area. Improvements in security leading to crime reduction could have similar effects and might also lead to a reduction in insurance premia.

The main stated preference technique is the contingent valuation approach in which market survey techniques are used to establish willingness to pay of beneficiaries for an improvement. Although there are well known limitations to these techniques practitioners are becoming increasingly adept at obtaining realistic estimates and removing obvious sources of bias to such an extent that the previous conventional wisdom that such methods could not be used effectively in developing countries is no longer so widely accepted (Whittington 1998, Anand 2007).

Once again potential sources of information for benefit valuation are not being used in a situation where they could provide at least an order of magnitude that could inform the discussion of value for money.

Conclusion

Perhaps the most convincing argument against trying to measure the value of benefits is the cost of the research required to get benefit estimates. At the individual project level this is undoubtedly true. However those involved in regeneration projects are being asked to pay great attention to additionality and are given access to a lot of guidance on the sort of orders of magnitude that might apply to particular projects. Why could similar guidance on valuation not be given?

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