Viewpoint

Using deprivation indices in regeneration: Does the response match the diagnosis?

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ABSTRACT

The UK government's framework for regeneration, "Transforming Places, Changing Lives", seeks to shape the way regeneration is conducted in England. The emphasis on economic transformation should not be unexpected, considering the Index of Multiple Deprivation – a key measure used throughout the UK literature for several years – has an emphasis on economic dimensions of deprivation. The paper critically assesses the manner in which the 'localism' of regeneration policy implementation is being promoted in the literature, while simultaneously using a national metric as an evidence base for action.

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Introduction

In 2008, the Department for Communities and Local Government (CLG) released a framework for regeneration policy in England for consultation; Transforming Places; Changing Lives (2008a). In May 2009, CLG produced a delivery document detailing how they would take forward that framework (CLG, 2009a). The purpose of the documents can be seen as an attempt by CLG to "shape the way regeneration is carried out in future in England" (CLG, 2008a, p. 3). They provide a uniform definition, used across central government for regeneration, "a set of activities that reverse economic, social and physical decline in areas where market forces will not do this without support from government" (HM Treasury, 2007, p. 15; CLG, 2008a, p. 6).

CLG have stated that regeneration should be used to economically transform areas, which should then contribute to the overall objective of creating "sustainable places where people want to live, work, and raise a family" (CLG, 2009a, p. 1). Overall, the government has three priority outcomes for 'guiding regeneration expenditure';

- improving economic performance and tackling worklessness, particularly in deprived areas;
- creating the right conditions for business growth; and
- creating sustainable places where people want to live and can work and businesses want to invest.

This can be differentiated from a standard text on urban regeneration, which states that – in the UK – regeneration is "generally" considered "the large-scale process of adapting the existing built environment with varying degrees of direction from the state" (Jones and Evans, 2008, p. 2). Jones and Evans also state that regeneration is a type of intervention particularly well suited to deindustrialised cities that are courting the new economy (for a comprehensive review of 'creative cities' and the new economy, see Evans, 2009), requiring public investment to change their physical infrastructure to adapt to the changing economy.

McCarthy (2007) indicates that a variety of other issues are important in urban 'regeneration initiatives', although adapting the existing built environment, or the physical planning of cities (and areas within cities), is still "indeed a central component" in regeneration initiatives, "but only in the context of a broader strategy encompassing a holistic approach that also provides social and economic benefits to local communities, particularly those with greatest need" (p. 137). Regardless of one's interpretation of regeneration policy, the identification of particular areas requiring targeted investment is an essential prerequisite for any regional policy.

This paper will identify a key unit of measurement used in characterising areas in need of regeneration, the Index of Multiple Deprivation. It will then highlight some limitations of the current literature and the way in which regeneration is linked with this index in research.

Measurement of areas in 'need' of regeneration

The ranking of areas is seen as a useful means to identify local governments in need of regeneration investment from central

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government, while a ranking of smaller areas is useful for local government to direct their resources more locally. In the framework produced by CLG (2008a, 2009a), the Index of Multiple Deprivation (IMD) is clearly seen as a key index in the identification of where regeneration ought to take place even where other indicators (e.g. literacy) are used they are normally used in a comparison between deprived and non-deprived areas (CLG, 2008a). The IMD ranks small (i.e. Lower Super Output Areas, with an average population of 1500) and large areas (i.e. local authorities) experiencing 'multiple deprivation' in an English context, and by so doing determines areas in economic, social and physical decline that perhaps should receive some form of area-based initiative (i.e. a regeneration initiative). This ranking permits the identification of the areas that constitute the nation's 'poorest neighbourhoods' (Lawless, 2006) and to determine areas of 'entrenched concentrations of poverty' (CLG, 2008a). Such a ranking of areas appears appealing to central government as an aide to prioritise expenditure to those areas which are in danger of being 'left behind', and require 'targeted investment' (*ibid*).

Index of Multiple Deprivation (IMD)

The current IMD can be seen as a result of 30 years of ongoing research into developing a composite indicator (in this context that is areas where large numbers of 'deprived people' reside) to aid government policy in targeting resources to 'priority areas', or deprived areas (see Noble et al. (2006) for detailed information on the history of the IMD). The underlying theoretical basis for determining deprivation is taken from Townsend's work in the 1980s. "People can be said to be deprived if they lack the types of diet, clothing, housing, household facilities and fuel and environmental, educational, working and social conditions, activities and facilities which are customary... People are in poverty if they lack the resources to escape deprivation." (Noble et al. (2006) quoting Townsend, p. 172).

The current IMD may be seen as an attempt by the University of Oxford's Department of Social Policy and Social Work to "[combine] a number of indicators, chosen to cover a range of economic, social and housing issues, into a single deprivation score for each small area in England" (Source: CLG, accessed June 2009). This allows each area to be ranked relative to one another according to their level of deprivation. The IMD contains seven domains for this purpose; income, employment, health, education, living environment, barriers to housing and crime. For a full explanation of how these domains are then combined to form a 'deprivation score' and ranked see Noble et al. (2008).

The government's framework for regeneration, and subsequent delivery document, make explicit references to deprived areas (CLG, 2008a, 2009a) and indicate the importance of the IMD. The index also seems to be broadly adopted within academic circles as a key indicator (Hill, 2000; Bull and Jones, 2005; Sharp et al., 2005; Kintrea, 2006; Jones, 2008; Macintyre et al., 2008; Briggs et al., 2008). Generally, the areas that rank in the highest deciles (in the top 10% (CLG, 2009a) or 20% (Haywood and Nicholls, 2004)) are those designated *deprived*. Terms such as 'need' (McCarthy, 2007), or 'social deprivation' (Boddy and Parkinson, 2004) have been used throughout the literature, with no clear means of assessment given. As such, it is difficult to determine how these and related concepts can be defined in a practical way; for example, at what point does an area experience a "vicious circle of decline" (National Audit Office, 2007, p. 10)? Both McCarthy (through Hill's (2000) use of an Index of Local Deprivation) and Boddy and Parkinson (by equating 'deprivation' with 'social deprivation') use Indices of Deprivation to identify areas with 'needs' or containing 'social deprivation'. The IMD, then, can be considered a proxy measure for a host of unfavourable descriptions of particular

areas, including a relatively straightforward concept such as 'decline'. The Urban Task Force (Rogers, 2005) explained that between 1993 and 2005 even areas with high levels of economic inactivity saw falls in unemployment. Regeneration, from time to time, may be concerned with 'declining areas', but on the whole is probably more concerned with the problems of having 'poor areas' (Atkinson and Kintrea, 2001). The IMD can be seen as an attempt to identify those areas.

Overall, the IMD can be considered successful in this function, evidenced by its take up across the world (Smith and Smith, 2005). Additionally, Scotland, Wales, Northern Ireland, and London have developed their own 'IMDs', as regeneration is now devolved to regional administrations. CLG guidance states that the Scottish, Welsh and Northern Irish use similar methodologies but cannot be compared. Although it is important to distinguish between these indices, the methodology is being discussed here and its subsequent use, and not the actual results (the Scottish Index of Multiple Deprivation's (SIMD) methodology is also discussed in parts of this paper).

Discussion on the IMD

The use of any composite indicator is "based on the notion that sub-indicators... have no common meaningful unit of measurement and there is no obvious way of weighting these sub-indicators" (Singh et al., 2009, p. 197). Aggregate indicators are susceptible to arbitrariness (*ibid*) and hiding "deficits in some sectors, which actually threaten the health of the whole system" (Bossel, 1999, p. 12). Valentin and Spangenberg (2000) suggest that the use of any indicator must be simple (the number of indicators must be limited and the method for calculating transparent) and directionally clear (obviously relevant). These criticisms were all made of the IMD at the start of this decade (see Noble et al., 2001; Deas et al., 2003). The Greater London Authority appeared particularly concerned with some parts of the index (Noble et al., 2001) – as it may underrate the extent of deprivation in London by, amongst other things, incorporating 'rural issues' of accessibility and thereby reduce in importance inner city deprivation (Robson, 2002). However, this did not appear a key issue in either the SIMD in Glasgow (Macintyre et al., 2008) or the IMD 2004 (Briggs et al., 2008). Interestingly, the criticisms were ascribed to the specific resource concerns of the Greater London Authority (Noble et al., 2001), which may indicate the importance local government attaches to any 'prioritising' of urban problems.

A much more extensive evaluation of the SIMD was undertaken for the Scottish Executive in 2005 by Glasgow University, where they attempted to replicate the SIMD 2004 using a different programming language than used in the original SIMD. Ultimately, it was difficult to replicate the results with exact precision (i.e. a 'handful' of data zones may be designated as deprived wrongly) (McConnachie and Weir, 2005). Indeed a minor error in the original methodology resulted in the misdiagnosis of two 'deprived' areas which resulted in the SIMD 2004 being changed. The SIMD can, therefore, be considered sensitive to small changes in raw data (including rounding). Because the raw indicator data (used in each domain) are mostly estimates of random variables, they will have some elements of uncertainty themselves. In short, the rank of any small area in terms of deprivation should not be viewed as a 'truth' but an estimate (*ibid*).

Since government uptake of indices of multiple deprivation is, and has been, extensive, it is the elements of subjectivity (e.g. which indicators were selected and how they are weighted by those participating in the IMD consultations) that can illuminate important national issues in the rationale behind area-based interventions rather than determining whether an area is truly deprived. The index implies the government's priorities in areas