

## LOCAL INCOMES AND POVERTY IN SCOTLAND

### Developing Local and Small Area Estimates and Exploring Patterns of Income Distribution, Poverty and Deprivation

#### About this briefing

This briefing outlines the main findings of a research project carried out during 2012 for the Improvement Service, acting on behalf of four Scottish Local Authorities - Fife, Falkirk, Edinburgh and Highland - and the Scottish Government, to develop improved measures of local incomes and poverty in Scotland. The research was undertaken by Prof Glen Bramley and David Watkins from the Institute for Housing, Urban and Real Estate Research, Heriot-Watt University.

#### Aim of this work

The main aim of this work was to provide a robust and transparent set of estimates of household incomes and poverty for local and small areas in Scotland. In doing so it provides more insight into the determinants of income and poverty levels and the significance of differences between different measures.

#### How this was done

The methodology takes national survey evidence, and through statistical modelling, links it to what we know about local and neighbourhood populations, their household characteristics and circumstances, and to infer from this what we would expect their income patterns to be.

#### Broad Trends and Patterns

Average income levels in Scotland rose moderately from 2000 to 2009 before falling with the recession in 2010. There has been significant progress in reducing relative poverty since 1999. Incomes (equivalised and before housing cost, BHC) vary between £340 and £480 per week at local authority level. Poorer areas include some rural and island areas as well as major cities and mixed industrial areas, while the most affluent authorities are in the commuting hinterland of major cities.

Median household incomes for Scotland are lower than those in the south of England, similar to the Midlands and Yorkshire, but higher than those in the North East and North West regions of England. For given types of locality, Scottish areas are generally comparable with similar areas in England, but there are considerable variations within geographical types, for example between poorer and more affluent cities.

Material deprivation varies more than low income poverty, when comparing types of locality. In the poorest local authorities between a quarter and a third of households are poor in terms of low income and/or material deprivation. However, in rural local authorities in Scotland poverty levels are generally lower. There are marked differences between the SIMD measure of low income and the survey-based numbers, particularly in rural areas.

## Local Authority Patterns

There are marked differences between local authorities in their distribution of datazones across the income levels, with Edinburgh standing out as particularly distinctive through having many zones with higher incomes. Although Glasgow is generally the poorest authority in Scotland, the income gap with other authorities varies markedly according to which measure is used; for example Glasgow is £91 per week below Fife on gross income but only £18 lower on equivalised income. The poorest zone in Glasgow is £85 per week below the poorest zone in Edinburgh, but in equivalised income the difference is only £15, underlining the importance of household composition.

Edinburgh and Glasgow generally tend to have high variability between zones and Highland lower, with Western Isles particularly low. The most extreme (poor) zones are generally in Glasgow, but the most affluent zones are in a variety of authorities depending on the measure. However, the poorest zone in Edinburgh is almost as poor as the poorest in Glasgow. However, Glasgow has a majority of zones which have high levels of poverty, a pattern shared to some extent with some other industrial areas, whereas in other authorities these high poverty zones tend to be a smallish minority.

Material deprivation tends to vary more than low income (BHC) and may be a better discriminator for pinpointing poverty. It is more similar in its distribution to SIMD, as confirmed by correlation evidence. Areas with high scores tend to be large public /social sector housing areas.

Patterns for families and working age adult households tend to be similar, except that the latter show markedly lower material deprivation in Edinburgh. The results for older households suggest less variation in income-based measures but more in material deprivation, but these results must be treated with more caution.

Correlations between the measures suggest a fair degree of correspondence, in terms of relative scores or rankings, between SIMD 2012 low income score and several of our poverty measures including material deprivation and low income after housing costs (AHC). However, the absolute poverty rates may differ between these indicators, and particular types of anomalous areas may not conform to the same patterns on all indicators. Low income before housing costs (BHC) has a rather different pattern.

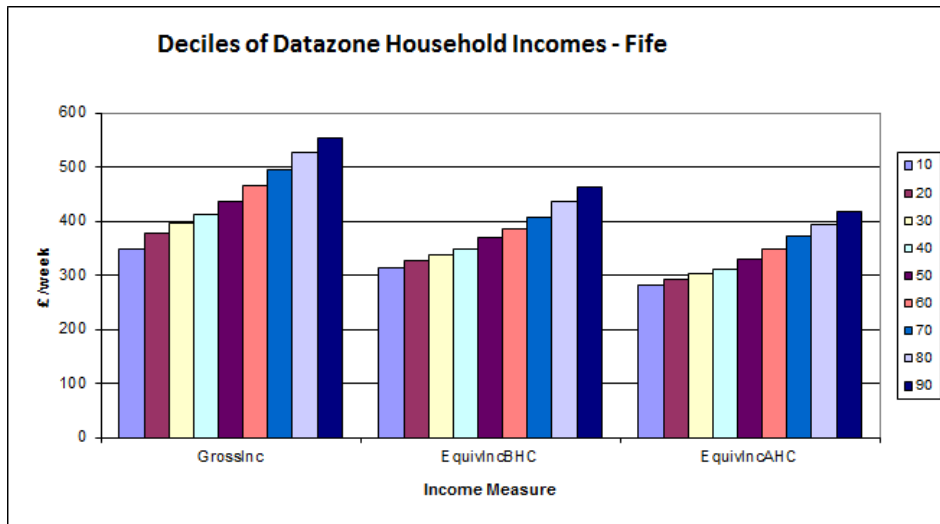
The models can estimate distributions of income for households within particular small areas, showing what proportion would be expected to have incomes below or above particular thresholds (e.g. £300 per week). These can also be used to estimate housing affordability rates. Changes since 2002 in absolute and relative income and poverty rates at neighbourhood scale do appear to be mainly related to the impact of new housing developments in different tenures.

## Determinants of Income and Poverty

The statistical models used to predict income and poverty levels can explain much of the variation at individual level and most of the variation between small areas in these levels. The most important predictors, which are indicative of the drivers of income differences, relate to economic activity, occupational class, car ownership, demographic factors including age, household types and ethnicity, housing consumption and values. These factors are mainly individual household attributes rather than area-level effects, although there are some influences from rurality, local earnings and employment rates, and SIMD scores (particularly on the education domain).

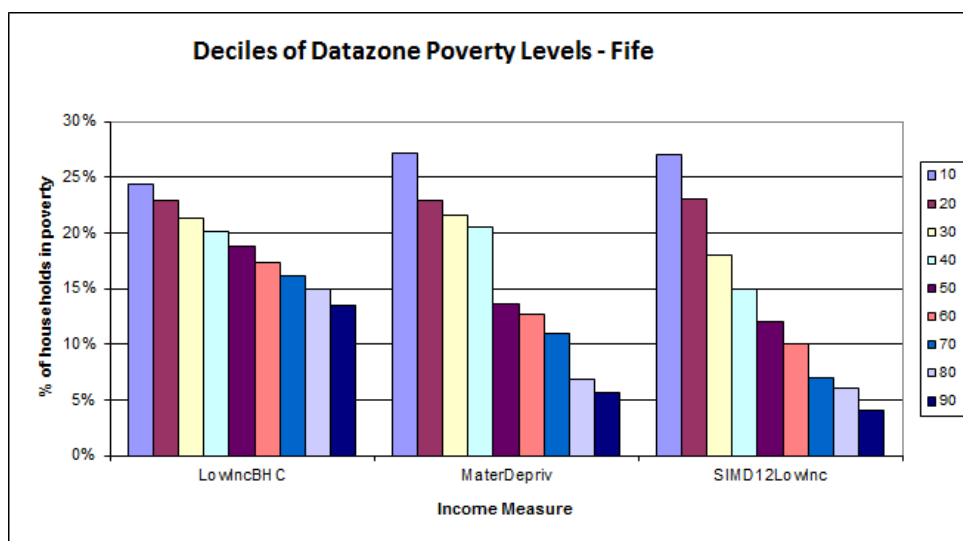
## Income in Fife

Households in Fife have an average gross household income of £449 per week. When we take account of household type, equivalised income is £378 per week before housing costs. After housing costs equivalised income is £340 per week. When we look at the distribution of income across datazones in Fife by deciles (tenths), gross household income ranges from £347 per week in the lowest decile to £554 per week in the highest decile. Equivalised income ranges from £314 to £462 per week (before housing costs), and from £281 to £417 per week (after housing costs).



## Poverty and low income in Fife

There are a number of different ways in which we can look at poverty and low income in households. In Fife, 19% of households are in low income before housing costs. There is relatively little variation in this across datazones, ranging from 24% in the lowest decile to 14% in the highest decile. 16% of households are experiencing material deprivation (doing without three or more essentials). This ranges from 27% in the lowest decile to 6% in the highest decile. Low income as defined by the Scottish Index of Multiple Deprivation 2012, shows a similar pattern. 14% of Fife households are income deprived, ranging from 27% in the lowest decile to 4% in the highest decile.



## Incidence of Different Measures

The fact that different measures of income or poverty present a somewhat differing story for different types of locality can be partly explained by the differential effects of eligibility and take-up of benefits, age and tenure effects. Further light on these differences is shed by looking at individual households in surveys who are 'poor' on one measure but not another (whose numbers typically exceed those who are poor on both). A large group of older households appear poor in terms of income, although not receiving low income benefits; but after allowing for housing costs, or looking at material deprivation, many of this group do not appear to be poor.

Housing costs may push more families into poverty. Other groups who appear poor in income terms, or in terms of material deprivation, although not receiving income-related benefits, include: younger households, single adults, larger families, private renters and non-white ethnic groups.

Groups who have low income (including after housing costs) but are not receiving income-related benefits are found fairly uniformly across all SIMD deprivation bands, whereas people receiving such benefits but not on low income are heavily concentrated in the most deprived bands. Correspondingly, the former group are found more in rural areas, while the latter group is more concentrated in West Central Scotland.

## Implications

Relative poverty has improved over the last decade, but absolute poverty and deprivation may be increasing since the recession. There is also a picture of working age households being harder hit by recent changes than the retired population.

It is important to monitor poverty using more than one indicator, and distinguishing different broad demographic groups. Families with children are particularly susceptible to poverty after housing costs and to suffer material deprivations, especially in the poorest cities.

Scotland's income and poverty levels are quite comparable with England, particularly for comparable types of locality (and leaving aside London). Scotland does not have uniquely different poverty concentrations, and nor is rural poverty more marked overall.

Total household incomes are affected by household composition and the more robust equivalised measures show smaller differences between the poorest areas in different localities.

Local authorities differ markedly in the pattern of distribution of incomes, whether measured in terms of small areas or households. While some have just a very few 'very poor' zones, others (notably Glasgow) have a very large number of these; Edinburgh has a notably large number of affluent zones; more remote rural areas tend to show less variation between zones of given population size.

The SIMD 2012 low income domain seems to function quite well as a method to identify and rank poor neighbourhoods, in terms of its correspondence with material deprivation and some low income measures, although it may be less reliable as a measure of the absolute extent of poverty and the degree of variation in this extent.

Changes to the benefit system related to UK deficit-reduction and welfare reform will have significant impacts on both income levels and on the measured take-up of income-related benefits. Reliance solely on the latter to monitor poverty could in this context be seriously misleading, and it will be even more important to refer to independent survey-based measures, and derived local estimates such as those reported here.

The study has generated a wide range of local measures which can be used for a range of purposes, including but not confined to the targeting and monitoring of efforts to tackle poverty nationally and locally. Although not benefitting yet from 2011 Census data, the study shows how it is possible to update most of the inputs, and so roll the estimates forward in future years.

## **Conclusions**

Through data that has previously not been available at neighbourhood level across Scotland, this study offers a new insight into local income and poverty in Fife.

## **Further information**

The full report including technical appendices can be found at:  
[www.improvementservice.org.uk/income-modelling-project](http://www.improvementservice.org.uk/income-modelling-project)

Local data for Fife can be viewed at a variety of geographic levels through the Income and Poverty Estimates profile and interactive thematic map at:  
[www.fifedirect.org.uk/knowfifedataset](http://www.fifedirect.org.uk/knowfifedataset)

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