

Secondary Analysis of Longitudinal data on Life in Rural Areas

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Location and Longitudinal Analysis

- a) Influence of setting on life course
- b) Changes in setting as life course changes
- c) Interaction of migration and other changes
- d) Contribution of migration to changes in the composition of populations in different (types of) places

Examples with reference to rurality

- a) Influence of setting on life course
 - better health and survival in rural areas
- b) Changes in setting in course of life
 - In-migration on family formation or retirement
 - Out-migration for education or employment
- c) Interaction of migration and other changes
 - Association of spatial and social mobility – ‘escalator region’
- d) Contribution of migration to changes in the composition of populations in different places
 - Balance of characteristics of movers in and movers out, leading to ‘gentrification’ of rural England

The Datasets

- Illustrated by CLS work on England in
- The ONS Longitudinal Study
- 1971- 2001
- and:
- The Millennium Cohort Study
- First two surveys
- 2001-2 and 2003-4

Issues in longitudinal geography

- A consistent classification of locations over time
- Do the available boundaries enclose homogeneous geography?
- Has the person moved?
- Have they moved to a different sort of place?
- Has the original classification changed around those who have not moved?
- Has the set of boundaries around origins and destinations changed?

Local (ie CLS) solutions

- Adopt the 2004 BBK/ DEFRA rural classification
- Apply to wards, as surveys contain ward info
- Sometimes we distinguish market towns within Urban England, and usually distinguish small town/ town fringe from villages and dispersed.
- Can distinguish sparse from villages as few wards entirely dispersed
- In MCS for both surveys we use a common set of ward boundaries (on which survey sampled in 1998)
- In the LS we have applied the DEFRA classification to 2001, 1991, 1981, 1971 using contemporary ward boundaries.
- This ignores changes in the nature of places, but gives the first consistent estimate of rural-urban population movement over a 30-year period.

Birth Cohort Studies

National Survey of Health and Development (NSHD)

Those living in GB born in one week in 1946

National Child Development Study (NCDS)

All those living in GB born in one week in 1958

1970 British Cohort Study (BCS70)

All those living in GB born in one week in 1970

Millennium Cohort Study (MCS)

All those born in selected areas of UK over 12 months beginning September 2000 in England and Wales, and December 2000 in Scotland and Northern Ireland

ONS Longitudinal Study

- 1% sample of population of England & Wales
- Data from four censuses – 1971, 1981, 1991 & 2001
- Linked to births and deaths
- 500,000 cases at each census, of whom nearly one-fifth Rural

NCDS: National Child Development Study

- Origins in 'Perinatal Mortality Survey' to examine social and obstetric factors associated with stillbirth and death in early infancy (n=>17,000 born in GB in one week of 1958)
- Survivors followed at ages 7, 11, 16, 23, 33, 42, 46 (prospective study)
- Multipurpose study: family life; education; employment; skills; housing; health; finances; etc
- Approximately 12,000 individuals still participating
- Now funded by ESRC with data collected every four years

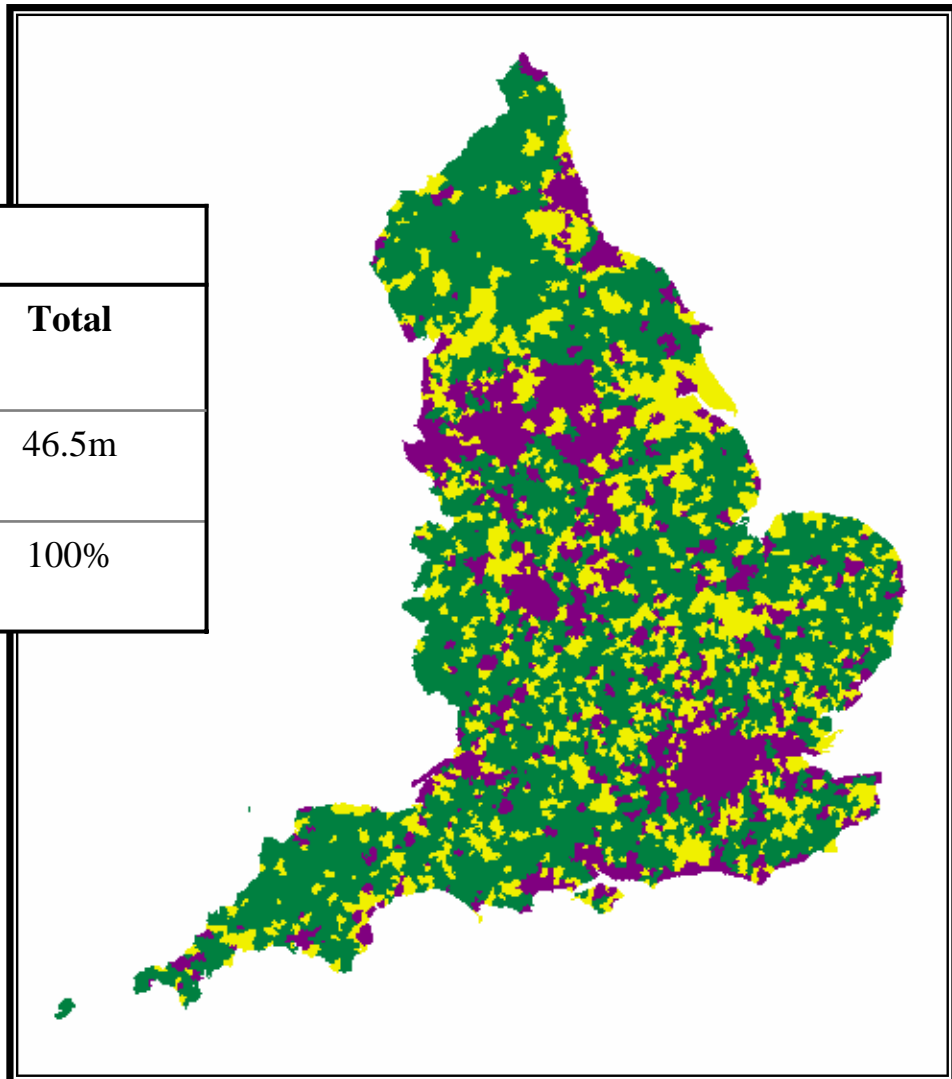
BCS70: 1970 Birth Cohort Study

- Origins in 'British Births Survey' (n=>17,000 infants born in GB in one week in 1970)
- Survivors followed at ages 5, 10, 16, 26, 30, 34
- Multipurpose study: family life; education; employment; health; finances; etc
- Approximately 12,000 individuals still participating
- Now funded by ESRC with data collected every four years
- Co-ordination with NCDS facilitates cross cohort comparisons

Millennium Cohort Study

- 18,552 families in the UK
 - 11,533 families in England 2001-2
 - 9,300 families in England 2003-4
- Over-Sampling of ethnic minority and high child poverty areas (electoral wards)
 - Results re-weighted

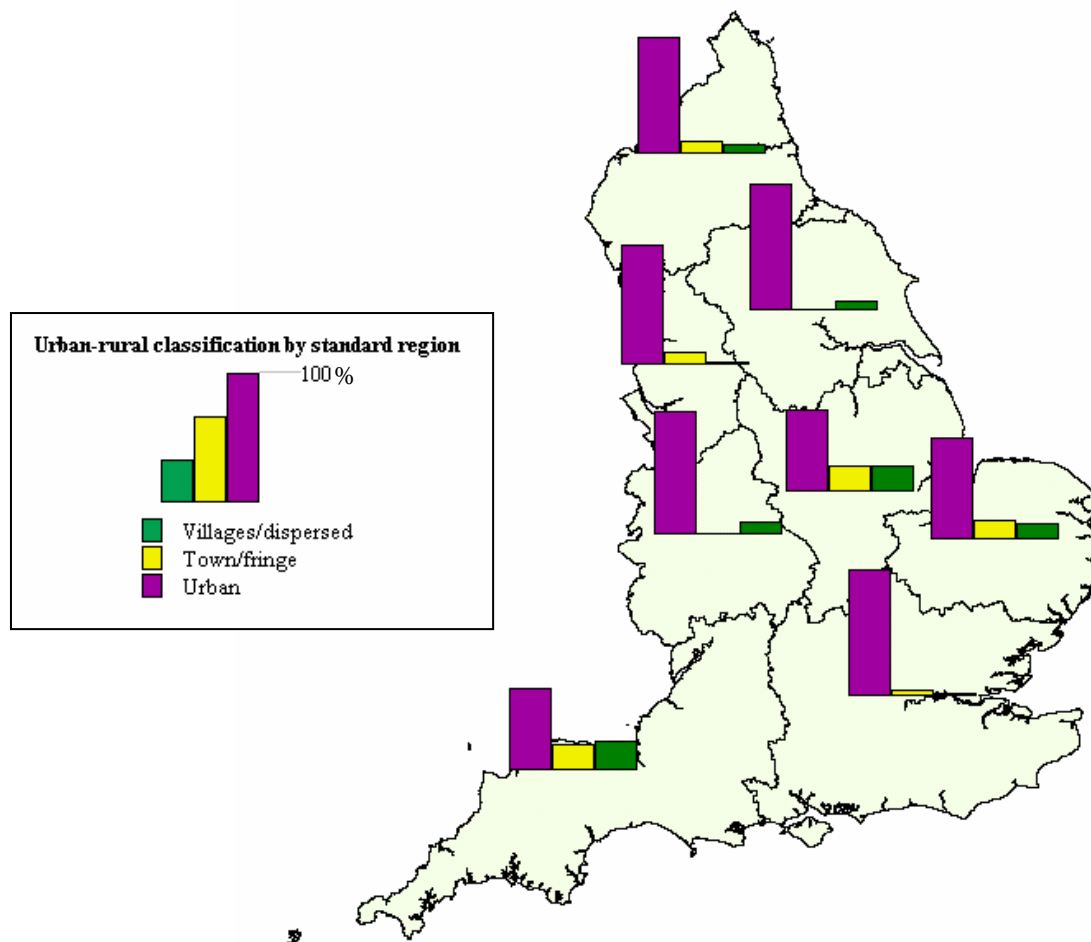
England: Rural-Urban classification of wards in 2001



Total England Population

Urban	Rural Town/ fringe	Villages/ dispersed	Total
37.87m	5.09m	3.59m	46.5m
81.4%	10.9%	7.7%	100%

Proportion MCS respondents by urban-rural classification in standard region, England 2000-2001 (weighted)



Source Millennium Cohort Study Sweep 1

Population of England in 2001 by Rural-Urban location in 1971

	All present in 2001	All over 30 in 2001	Rural over 30	Urban over 30
Rural in both 1971 and 2001	5.4	8.4	42.0	
Urban in 1971-Rural in 2001	5.7	9.0	45.0	(11.2)
Not present 1971- Rural 2001	7.6	2.6	13.1	
Rural 1971- Urban 2001	3.4	5.3	(26.5)	6.6
Urban in both 1971 and 2001	38.4	59.9		75.0
Not present 1971- Urban 2001	39.5	14.7		18.4
All rural in 2001	18.7	19.9		
<i>Net moves to rural since 1971, as % of base population</i>		3.7	18.5	4.6
Base numbers	505342	323295	64591	258704

Population enumerated in England in 2001.

Source: ONS Longitudinal Study

Percentage of Graduates in 2001 among various migration streams between 'villages and dispersed' and the rest of England

	Percentage		
	1971-2001	1981-2001	1991-2001
Urban or small town to village	29.5	28.2	27.7
Village to urban or small town	17.4	24.6	25.2
Village both times	15.4	18.6	21.9
Urban/Small town both dates	17.0	19.0	19.0
Total (n)	139594	199226	199772

Persons aged 20-59 in 2001, enumerated in England in the 2001 census and also in 1971, or at both 1981 and 1991 Censuses. Graduate - Qualification Level 4/5: First degree, Higher degree, NVQ levels 4-5, HNC

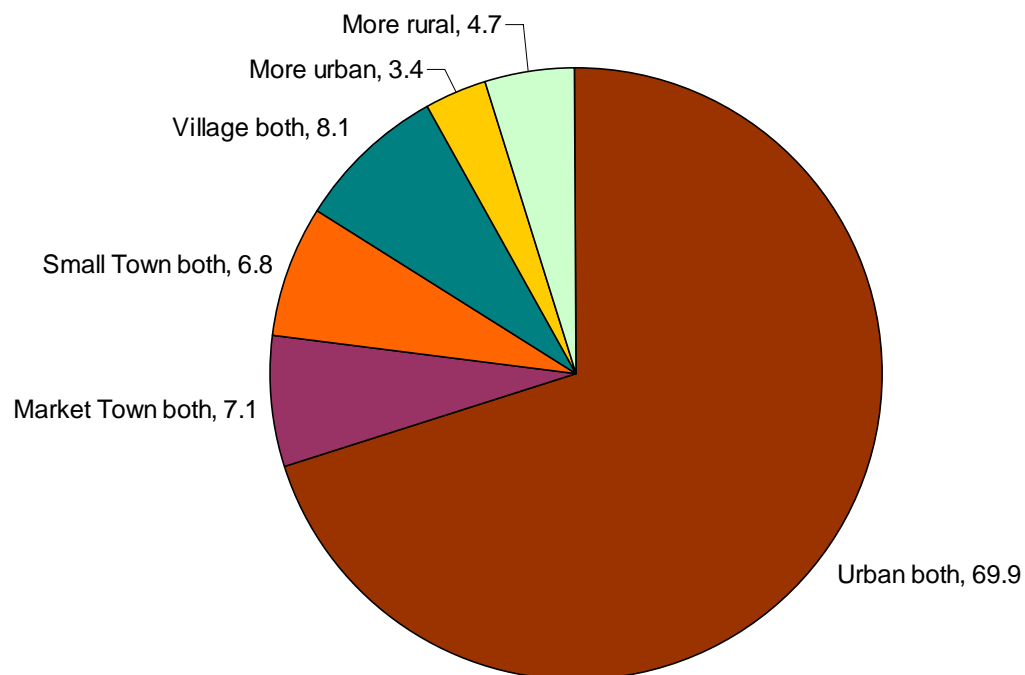
Source: ONS Longitudinal Study

MCS 2 sweeps in England: unweighted sample

MCS Families in England Sweep1 and Sweep 2:					
MCS1: 2001-2002					
MCS2: 2003-4	Urban >30k	Market Town 10k- 30k	Sm<10K Town & Fringe	Village, or Sparse	Total
Urban	7174	23	70	41	7308
Market Town	71	511	31	35	648
Small Town	114	11	478	37	640
Village etc	122	27	37	507	693
Total	7481	572	616	620	9289

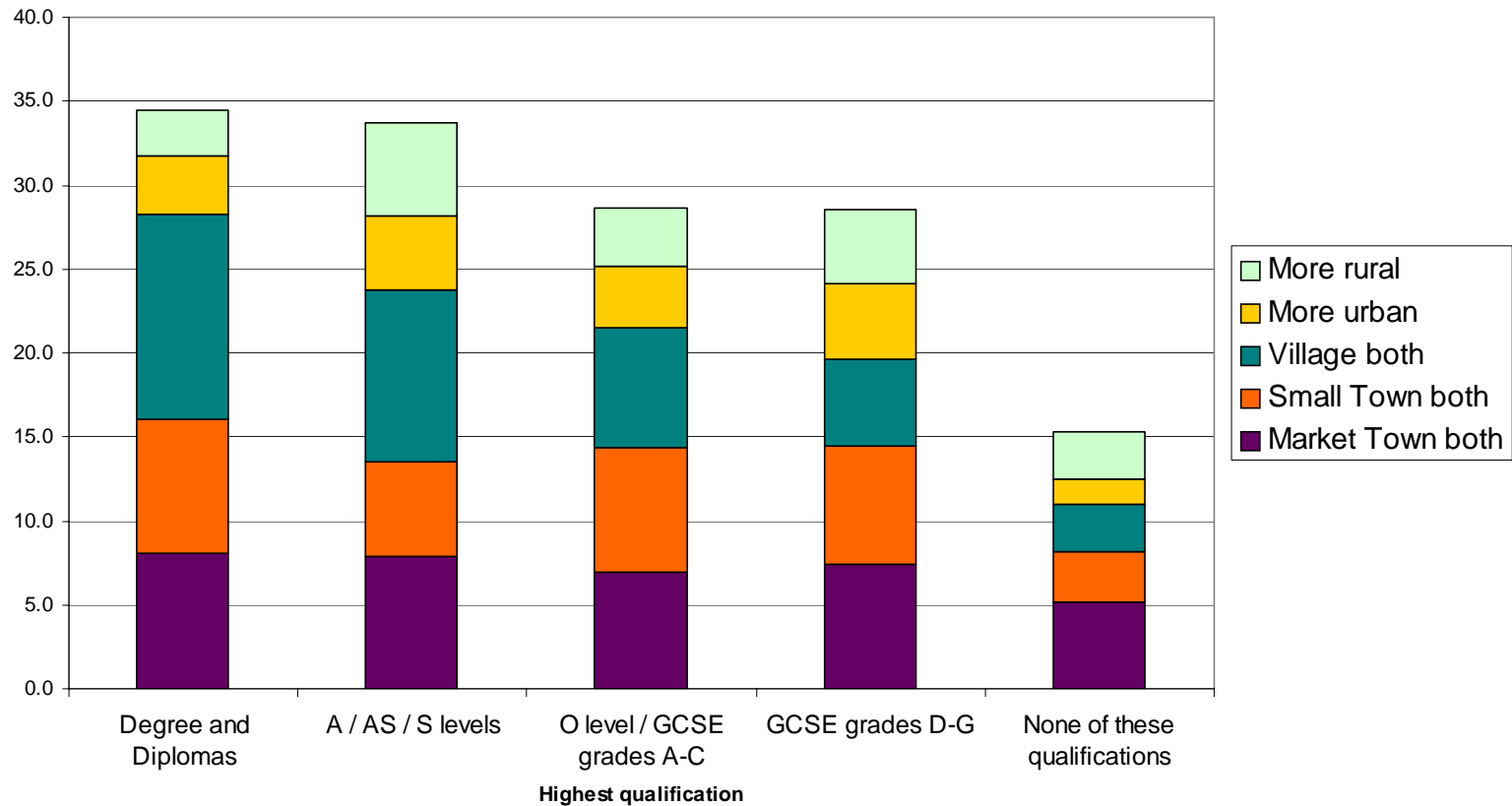
MCS families in England by rurality, weighted

MCS familes in England by rurality at 2 surveys 2 years apart

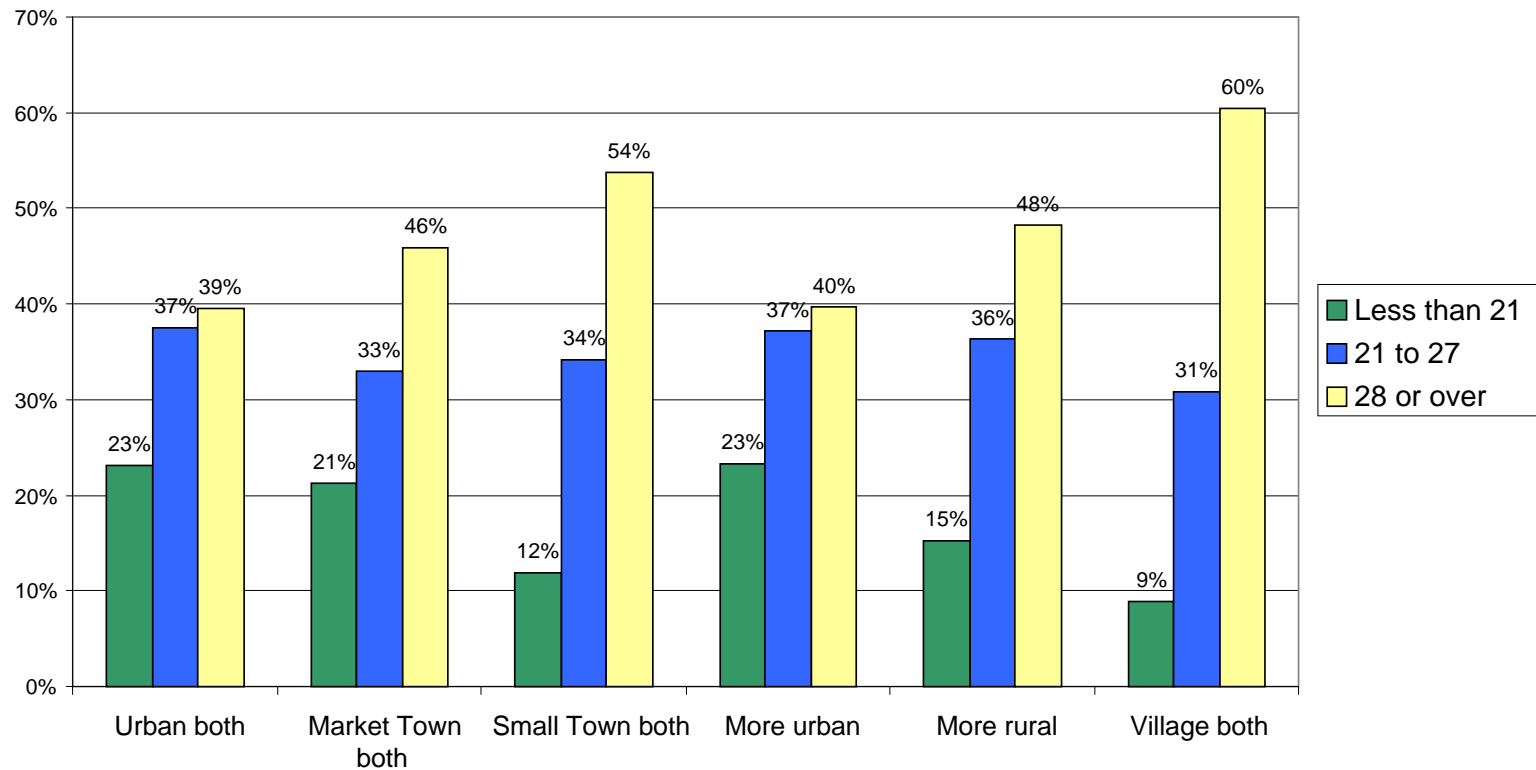


Rural-urban mobility and qualifications: MCS

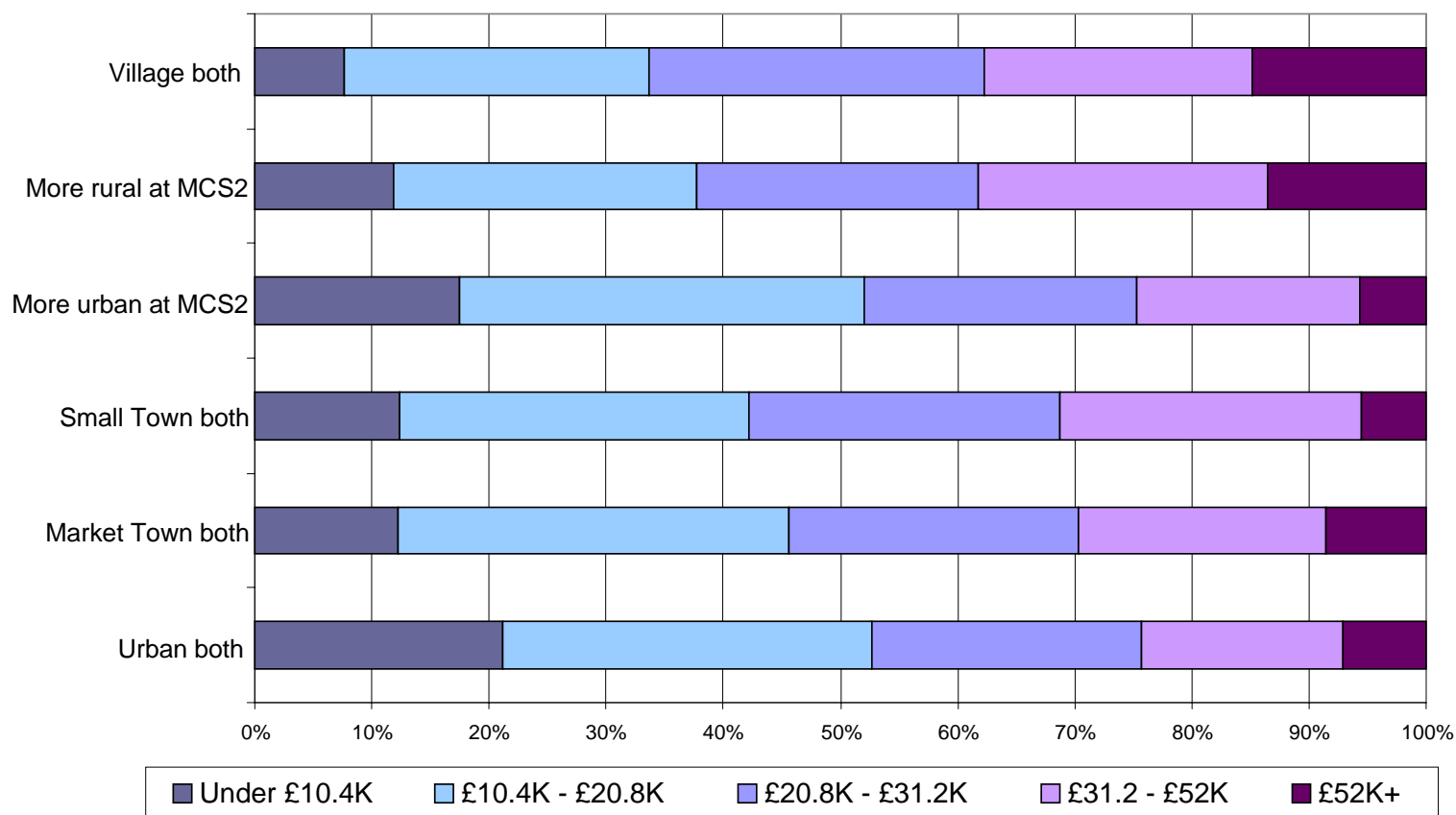
MCS mothers not in urban England at both sweeps 1 and 2 by wherabouts and qualifications



Age of mother at first birth and location at two MCS Surveys in England



Net family income by location in England at MCS1 and MCS2



Conclusions

- Secondary analysis of large scale data sets offer insight into the spatial dimensions of lifecourse change, and of the lifecourse processes behind social change in particular zones. Geo-coding of 1958 and 1970 cohorts under development
- It cannot offer detailed accounts of what is going on in every particular location:
 - a) because of sample size; and
 - b) the need to protect longitudinal informants (and hence the studies) from disclosure of their identity
- Need to develop facilities to improve geographical exploitation of these resources while minimizing the risk
- Also scope to develop the parallel analysis of small scale qualitative studies and the broader and deeper context revealed in large longitudinal surveys



Following lives from birth and through the adult years.

The Centre for Longitudinal Studies (CLS) is an ESRC Resource Centre based at the Institute of Education. The Centre houses three internationally-renowned birth cohort studies: the 1958 National Child Development Study, the 1970 British Cohort Study and the Millennium Cohort Study. **More about CLS.**

News

14/09/2006 CLS sets up a new working group for the 2008 fieldwork for NCDS and BCS70

CLS has set up a new working group to discuss measures of cognition and personality in the next round of NCDS and BCS70 fieldwork.

Events

17/10/06 1958 National Child Development Study (NCDS) and 1970 British Cohort Study (BCS70): a workshop for potential users.

On Tuesday 17 October CLS will be holding a one-day introductory workshop on the 1958 National Child Development Study (NCDS) and the 1970 British Cohort Study (BCS70).

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