



Health Inequalities across Great Britain

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for the InHALE project

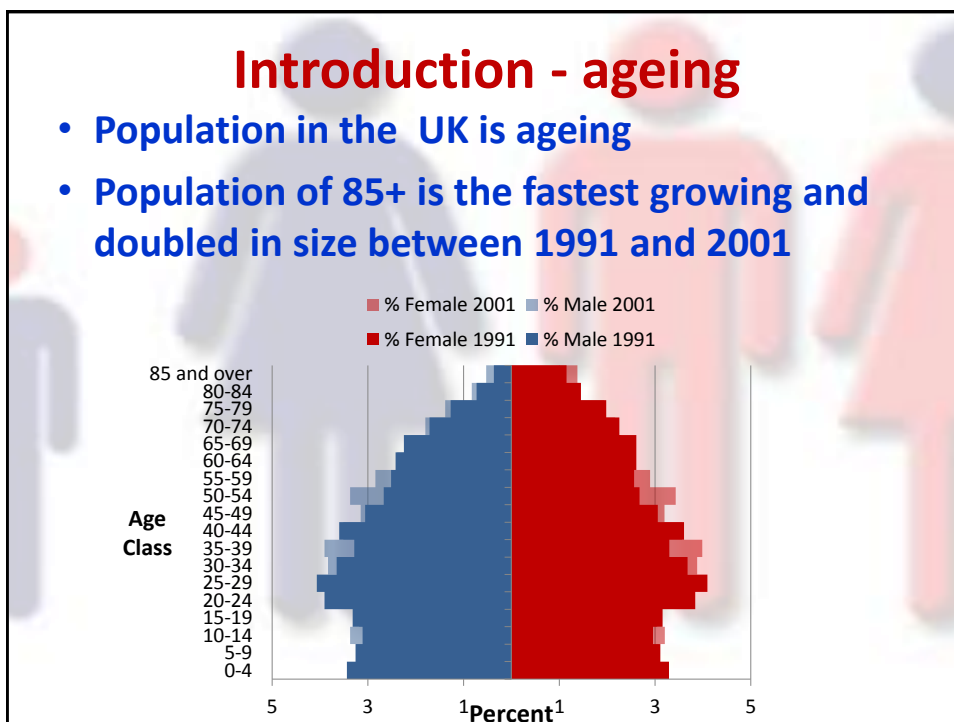
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InHALE -
Inequalities in Healthy Active Life Expectancy: the role of time, place, person and methods
ESRC Research Fund RES-062-23-2970 1 October 2011 - 30 September 2014
<http://research.ncl.ac.uk/InHALE>

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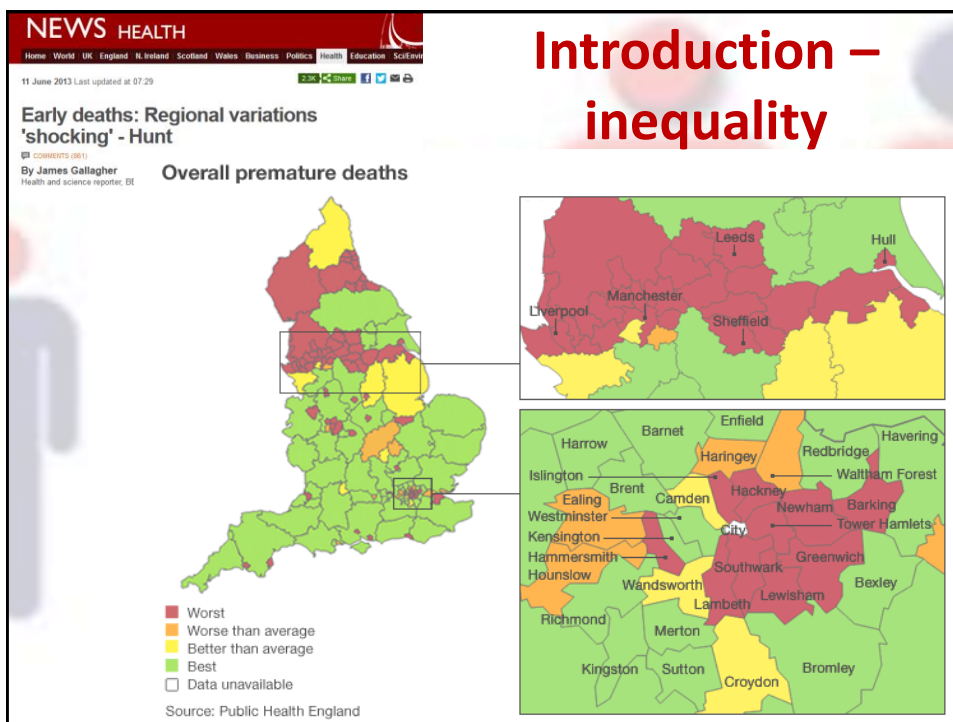




Introduction - ageing

- By 2030 UK population 85+ will have grown 63% (PI: 57,108) compared to 2010
- By 2050 UK populations 85+ will have increased 217% (PI: 148,315) compared to 2010 (the higher increase in 2030-2050 is due to the peak baby boom cohorts reaching 85 before 2050)
- In the 2011 Census 83% of people 85+ in England and Wales report a long-term health problem or disability with day-to-day activities limited (a lot or a little)

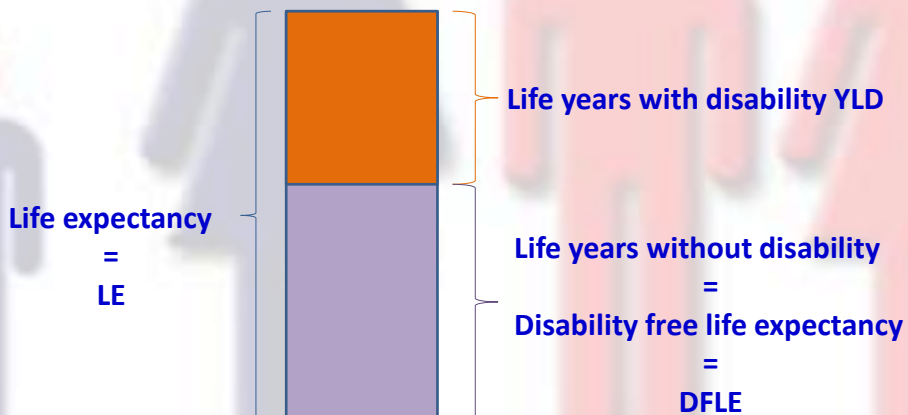


Research focus

- **Patterns of inequality: life expectancy (LE) and disability free life expectancy (DFLE) at different ages: at birth and 85+ across time in 1991 and 2001**
- **Socioeconomic factors explaining variations across local areas**
- **Note: the 2011 Census health data have been published but work is needed to harmonize the measures with 1991 and 2001, as we show on a later slide**

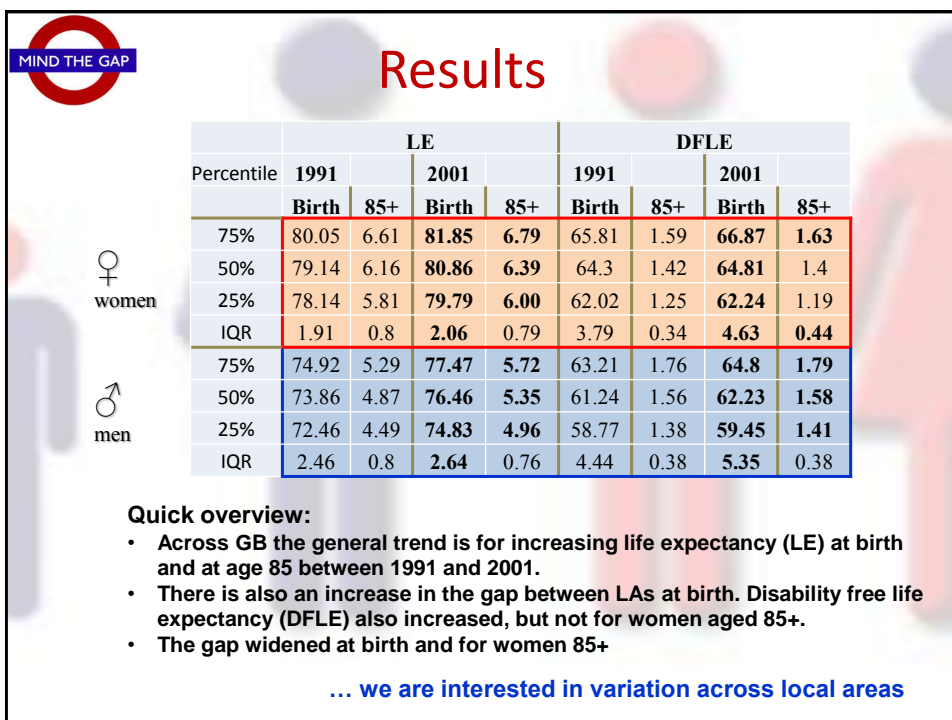
What are health expectancies?

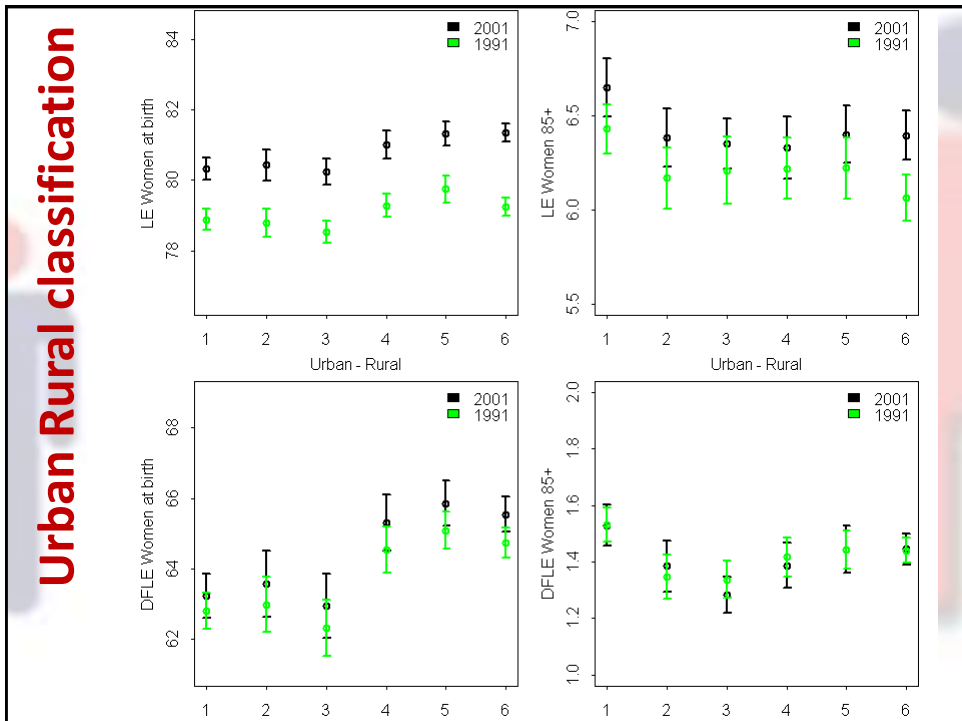
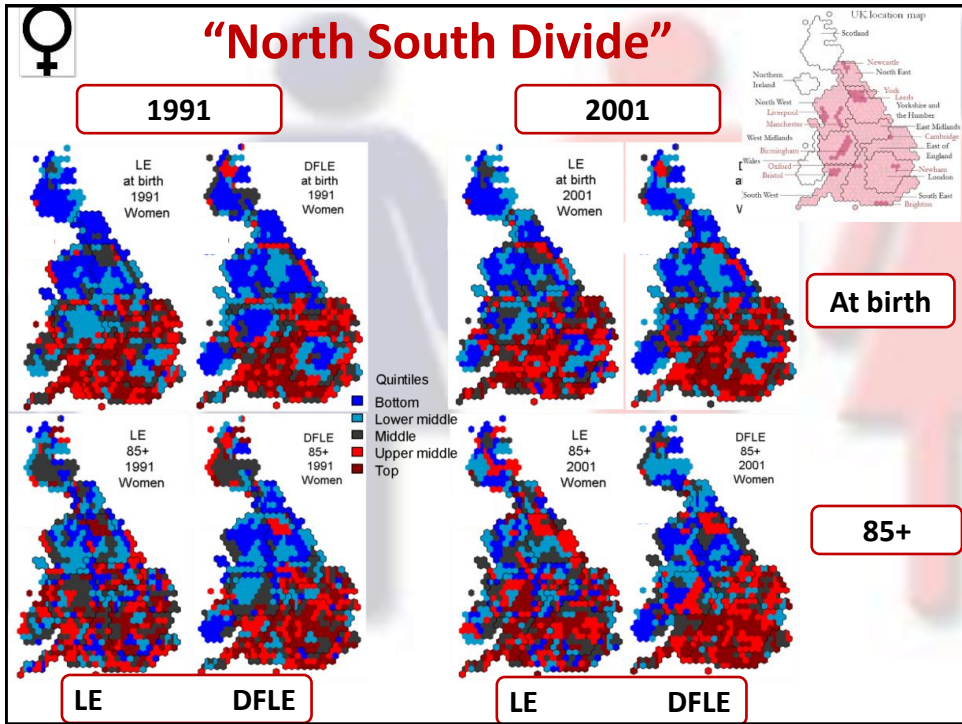
Example: Disability free life expectancy

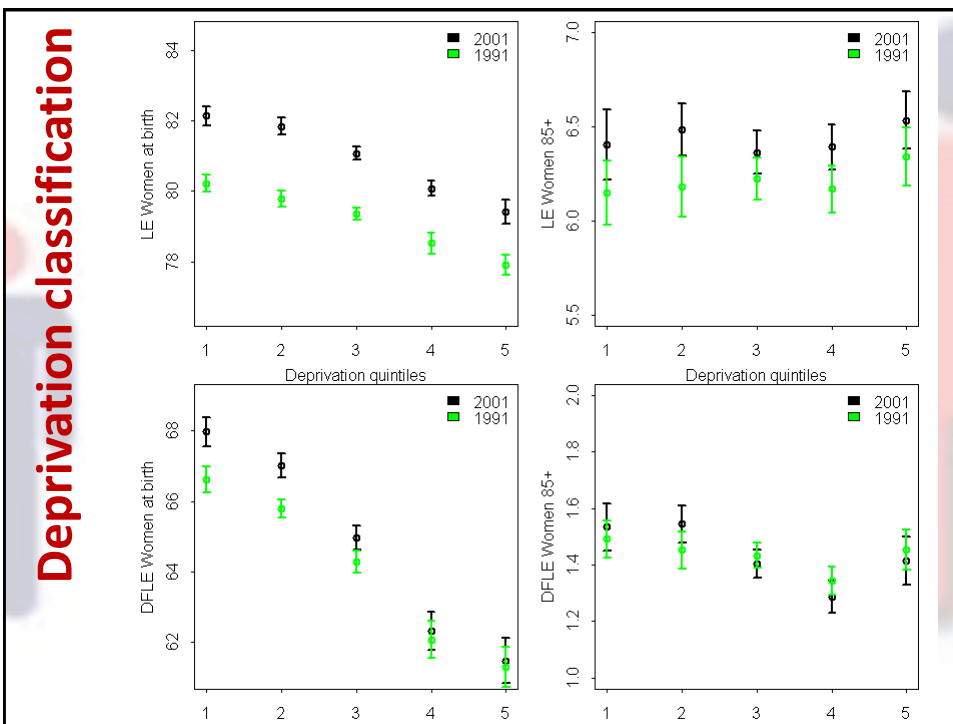


Data and Method for Disability Free Life Expectancy -DFLE

- **Census questions 1991, 2001 and 2011**
 - [1991] Do you have any long-term illness, health problem or **handicap** which limits your daily activities or the work **that** you can do? Include problems which are due to old age. (1) Yes, I have a health problem which limits activities, (2) I have no such health problem
 - [2001] Do you have any long-term illness, health problem or **disability** which limits your daily activities or the work you can do? Include problems due to old age. (1) Yes, (2) No.
 - [2011] Are your **day-to-day activities** limited because of a health problem or disability **which has lasted, or is expected to last, at least 12 months?** Include problems related to old age. (1) Yes, limited a lot, (2) Yes, limited a little, (3) No
- **Relational model to align 1991 to 2001 data**
 - Using methods based Brass (1971) developed by Marshall (2009)
 - Fit Brass model at national scale. Apply parameters at local scale



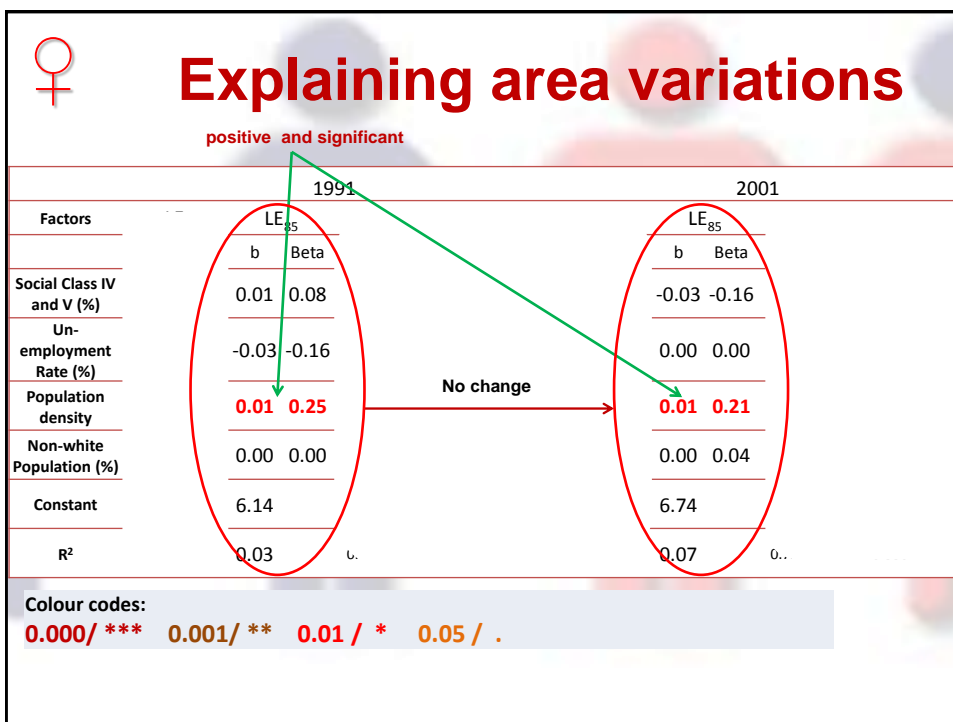
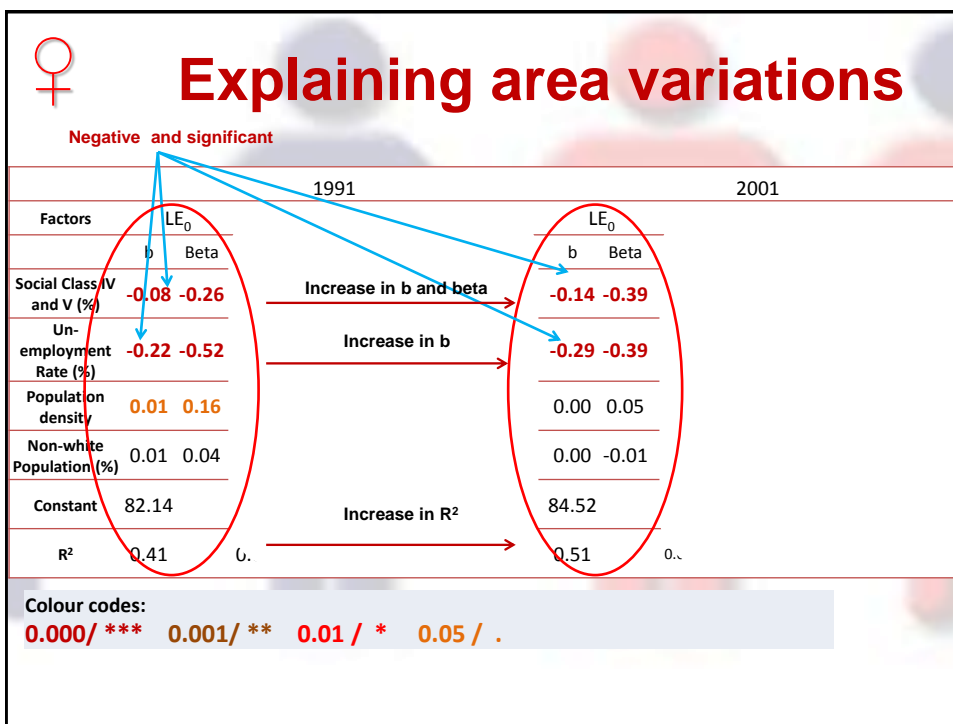


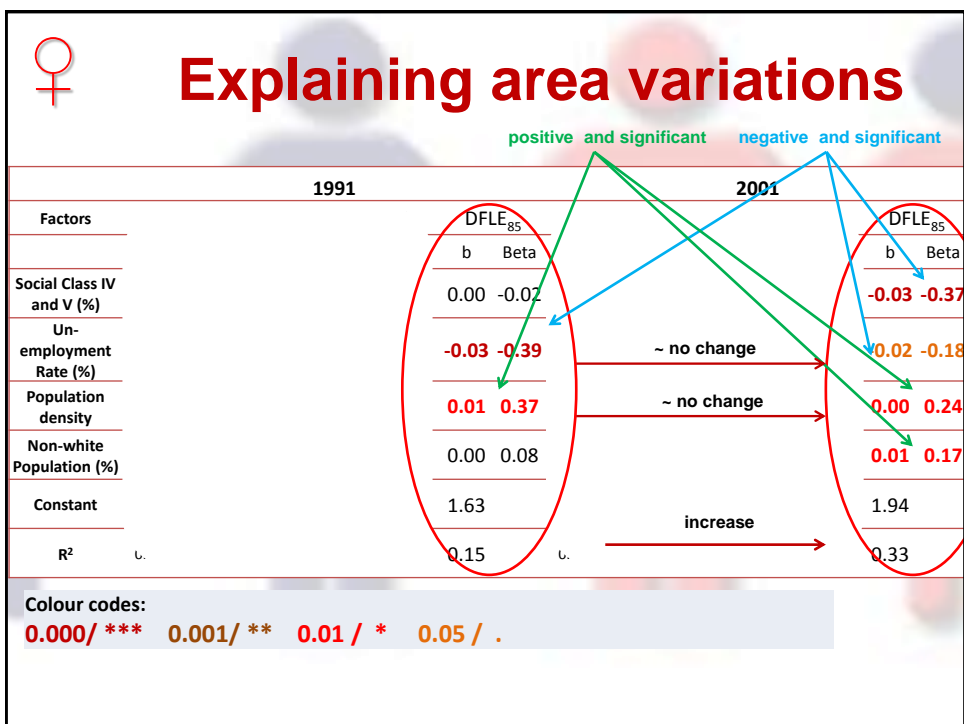
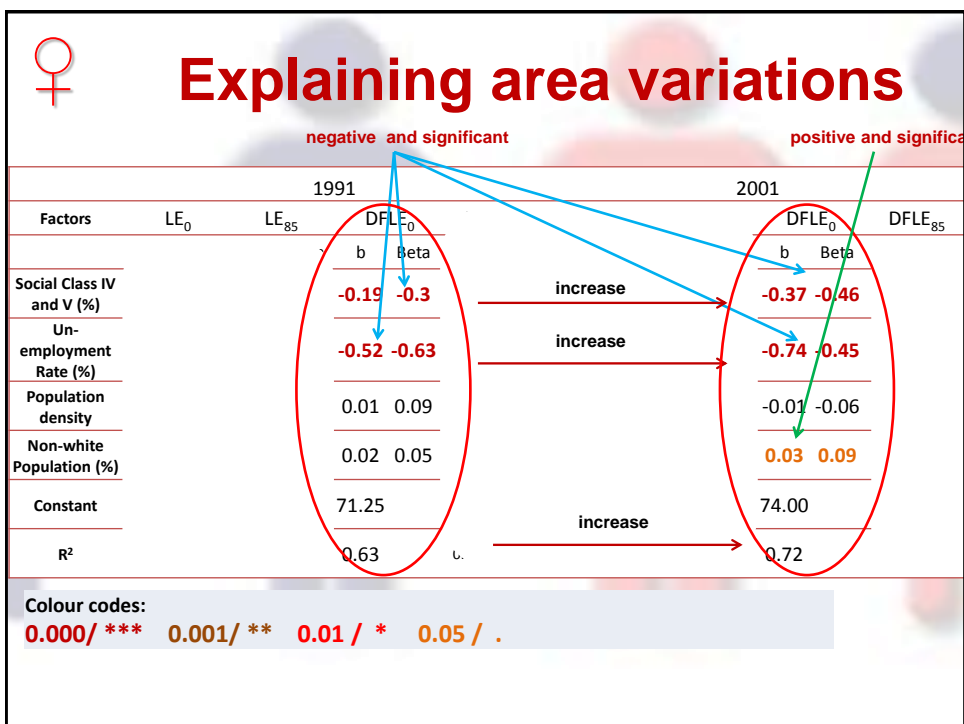


Explaining area variations

Factors	1991								2001							
	LE ₀		LE ₈₅		DFLE ₀		DFLE ₈₅		LE ₀		LE ₈₅		DFLE ₀		DFLE ₈₅	
	b	Beta	b	Beta	b	Beta	b	Beta	b	Beta	b	Beta	b	Beta	b	Beta
Social Class IV and V (%)	-0.08	-0.26	0.01	0.08	-0.19	-0.3	0.00	-0.02	-0.14	-0.39	-0.03	-0.16	-0.37	-0.46	-0.03	-0.37
Un-employment Rate (%)	-0.22	-0.52	-0.03	-0.16	-0.52	-0.63	-0.03	-0.39	-0.29	-0.39	0.00	0.00	-0.74	-0.45	-0.02	-0.18
Population density	0.01	0.16	0.01	0.25	0.01	0.09	0.01	0.37	0.00	0.05	0.01	0.21	-0.01	-0.06	0.00	0.24
Non-white Population (%)	0.01	0.04	0.00	0.00	0.02	0.05	0.00	0.08	0.00	-0.01	0.00	0.04	0.03	0.09	0.01	0.17
Constant	82.14		6.14		71.25		1.63		84.52		6.74		74		1.94	
R ²	0.41		0.03		0.63		0.15		0.51		0.07		0.72		0.33	

Colour codes:
0.000/ *** 0.001/ ** 0.01 / * 0.05 / .







Findings, conclusions and discussion

- Widening gap (1991-2001) in DFLE and LE across GB
- LE_0 increased across all deprivation classes significantly, less so in more deprived areas
- $DFLE_0$ only increased significantly in less deprived areas
- More deprived areas are being left behind?
- Stronger gradient across deprivation classes in $DFLE_0$ than LE_0 and larger gap in DFLE in 2001 increased this gradient.



Findings, conclusions and discussion

- Living in a deprived area does not matter for oldest old: *au contraire*, oldest old in most deprived areas had highest LE
 - Perhaps reflecting a survival effect but also success in delivering health care for the older old in all communities
- At younger ages living in urban areas disadvantages, both in regards to LE and DFLE
 - This may reflect counter urbanisation (out-migration) of affluent people?



Findings, conclusions and discussion

- For women, area characteristics unemployment rate and low social class explain much of the variation in $DFLE_0$, less for LE_0 and not much for the 85+
- Unemployment rate and social class have equal affect on variation in 2001 reflecting the steep increase in employment across the decade
- Our results are similar for men, but $DFLE_0$ is positively affected by % non White population

THANKS

Questions?

Scotland - Edinburgh - REVES 2014
28 to 30 May 2014
John McIntyre Conference Centre
Pollock Halls Campus

<http://research.ncl.ac.uk/InHALE/REVES2014/Home.html>

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