Neighbourhood Effects and Occupational Mobility in Scotland: limits to the ‘tenure-split’ approach

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Outline

1. Neighbourhood Effects Research

2. Neighbourhood Effects and Occupational Mobility

3. The Tenure-split Approach
Neighbourhood Effects Research

• *Claim*: an individual’s neighbourhood has an independent impact on their life chances in addition to their individual characteristics.

• *Extensive literature*: association between neighbourhood context and individual outcomes (health, educational attainment, income etc.).

• *Observational studies and causal inferences*: neighbourhood effects versus neighbourhood selection.
Neighbourhood Effects and Occupational Mobility

- **Occupational transitions**: relationship between neighbourhood deprivation and likelihood of upward / downward occupational mobility.

- **Theory**: possible mechanisms.
  - Social-interactive; Geographic; Environmental; and Institutional (Galster 2012).

- **Methodological issue**: possible selection bias.
  - individual-level factors relevant to both occupational outcomes and neighbourhood selection that are hard to observe and control for.
Tenure-split Approach (1)

• **Tenure split as ‘natural experiment’**
  – *Claim*: near random allocation of social renters with respect to neighbourhood.
  – Choice of neighbourhood not affected by individual characteristics.

• **Tenure comparison:**
  – *Social Renters*: models reveal the true scale of neighbourhood effects purged of selection bias.
  – *Comparison with private sector*: indicates the scale of selection bias.

• **Examples:**
Tenure-split Approach (2)

• **Previous results:**
  – Owner occupiers: people in more deprived neighbourhoods had lower rates of upward mobility
  – Social Renters: claimed that no relationship with respect to neighbourhood deprivation
  – Hence differences between tenures used to cast doubt on observational literature and associated policy measures.

• **Our study:**
  – Critiques theory i.e. claims about the random nature of social housing allocations in the UK and re-examines results of UK studies.
  – Presents new analyses using the SLS, with a focus on occupational mobility.
Data and Methods (1)

- **Scottish Longitudinal Study (SLS):** 5.3% of the population; based upon a semi-random sample of 20 birthdates; contains no identifiable individual level data.

- *Key strength of SLS:* repeat observations of large numbers of people over time with fine geographic details.


- *Sample:* aged 16-50 and economically active at the beginning of each period.

- *Models:* separate models by tenure.
Data and Methods (2)

• **Occupational status groupings:**
  – National Statistics Socio-economic Classification (NS-SeC)
  – ‘Low’: NS-Sec categories 6, 7
  – ‘High’: NS-Sec categories 1, 2, 3, 5

• **Neighbourhood deprivation:** Carstairs Index measured at the Output Area-level.

• **Control variables:** urban-rural location; gender; age; ethnicity; qualifications; health (presence of long-term limiting illness); having a child; having a partner; access to a car; and occupational category.

• **Regression:** logistic and linear.
Results

• **Neighbourhood deprivation quintiles:**

• (3) **Continuous measure of deprivation:**
  – Linear regression using neighbourhood deprivation deciles as a continuous variable.
  – Can be combined through synthesised estimate of the relationship for each tenure
    • simple weighted least squares approach (Becker & Wu 2007).
Results are author’s analysis of SLS data.
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(3) Linear regression with single linear term for deprivation

Results are author's analysis of SLS data
Conclusion

• Limited scope for the ‘tenure-split’ approach to help estimate causal neighbourhood effects in the UK.

• New analysis confirms the need to find alternative sources of exogeneity.


