

# Neighbourhood Effects and Occupational Mobility in Scotland: limits to the 'tenure-split' approach

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# Acknowledgements

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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*:
  - Canada: Oreopoulos 2003.
  - UK: van Ham & Manley 2010, 2015; Manley & van Ham 2012.

# 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 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.
- *Time periods*: occupational mobility 1991-2001 and 2001-2011.
- *Sample*: aged 16-50 and economically active at the beginning of each period.
- *Models*: separate models by tenure.



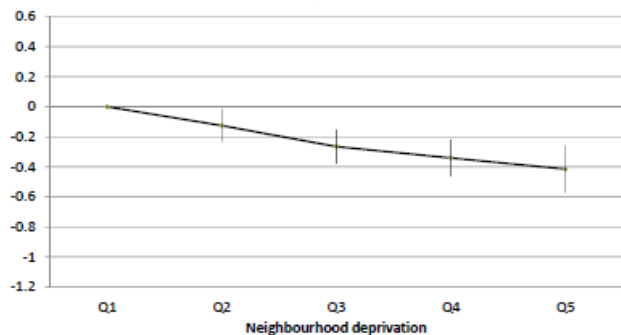
# Data and Methods (2)

- *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.

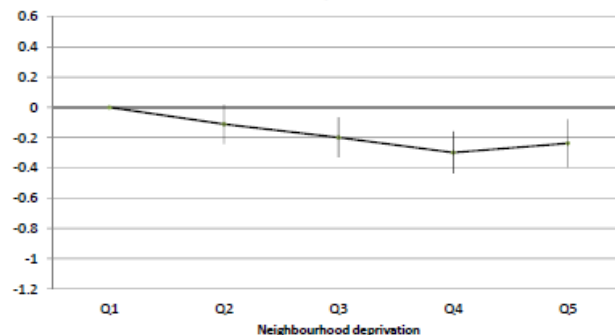
# Results

- *Neighbourhood deprivation quintiles:*
  - (1) Low-High models, 1991-2001 and 2001-2011
  - (2) High-High models, 1991-2001 and 2001-2011
- *(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).

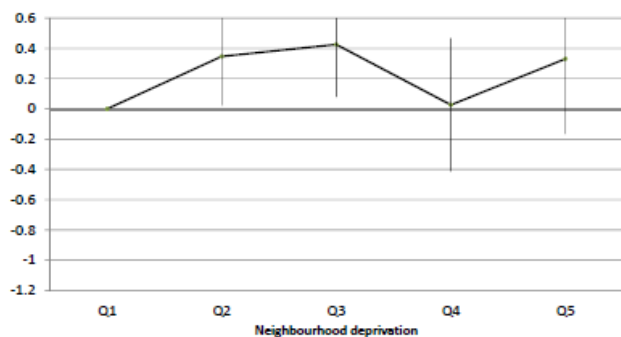
a. Owner-occupier - 1991-2001



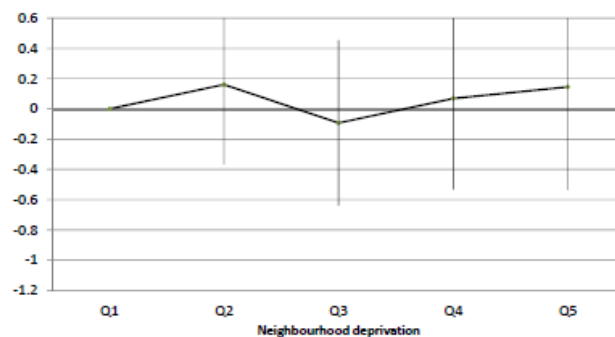
b. Owner-occupier - 2001-11



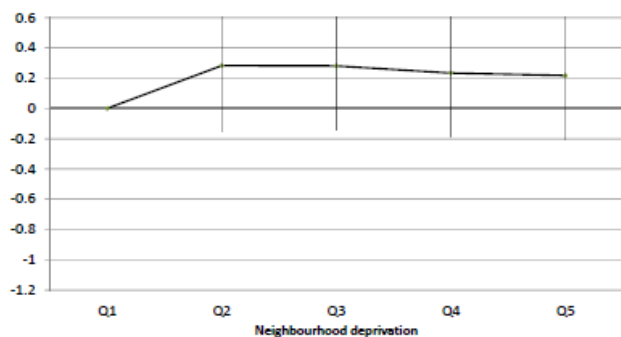
c. Private renter - 1991-2001



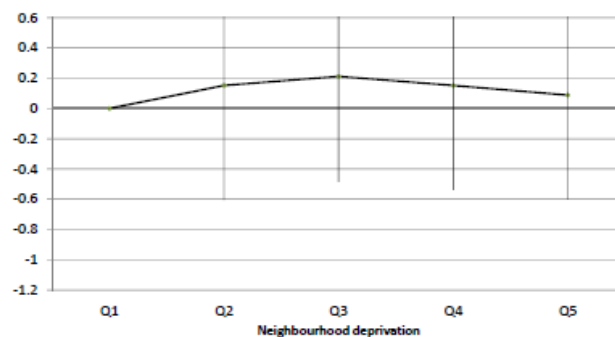
d. Private renter - 2001-11



e. Social renter - 1991-2001

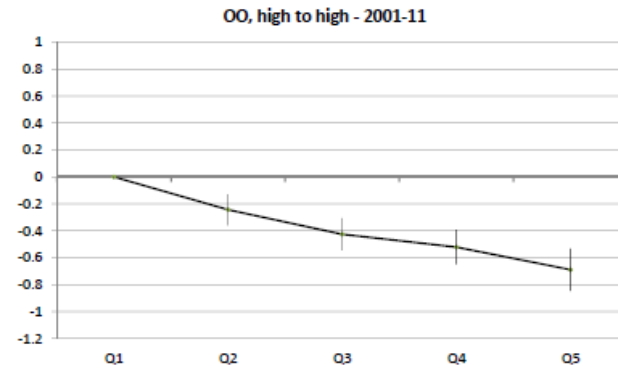
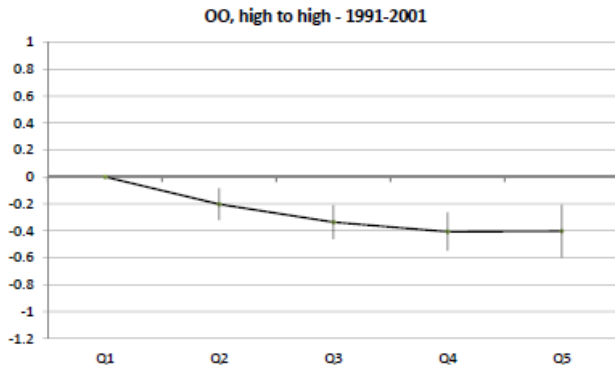


f. Social renter - 2001-11



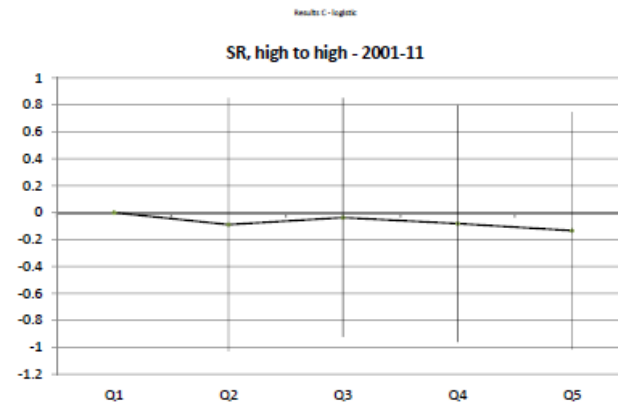
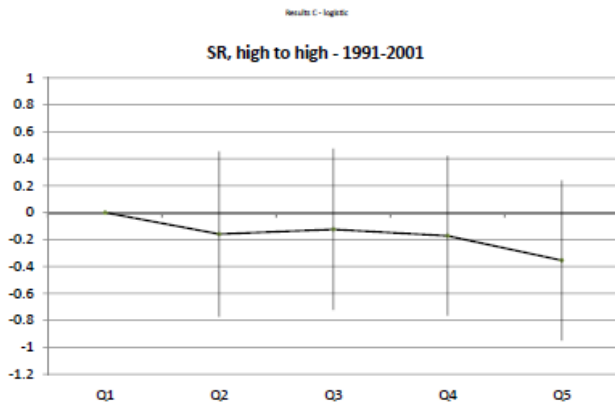
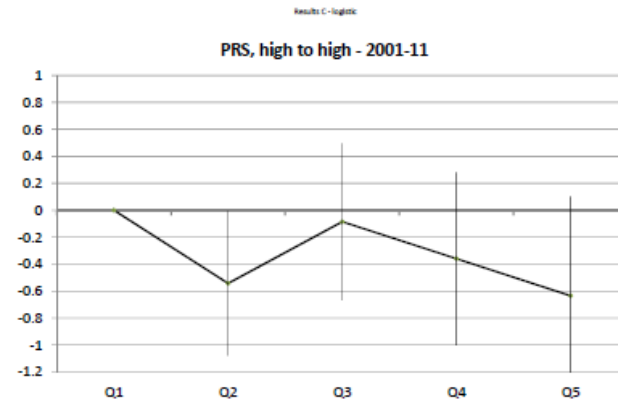
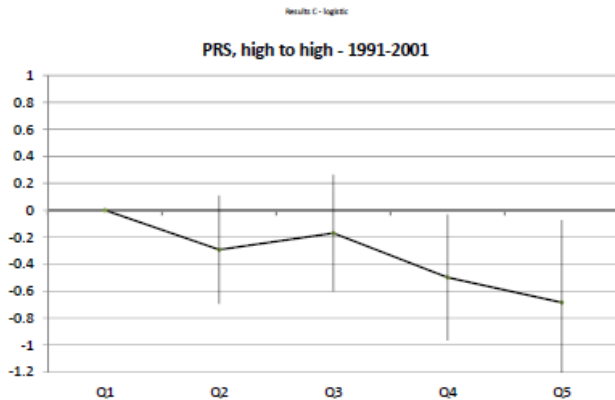
(1) Low-High, 1991-2001

(1) Low-High, 2001-2011



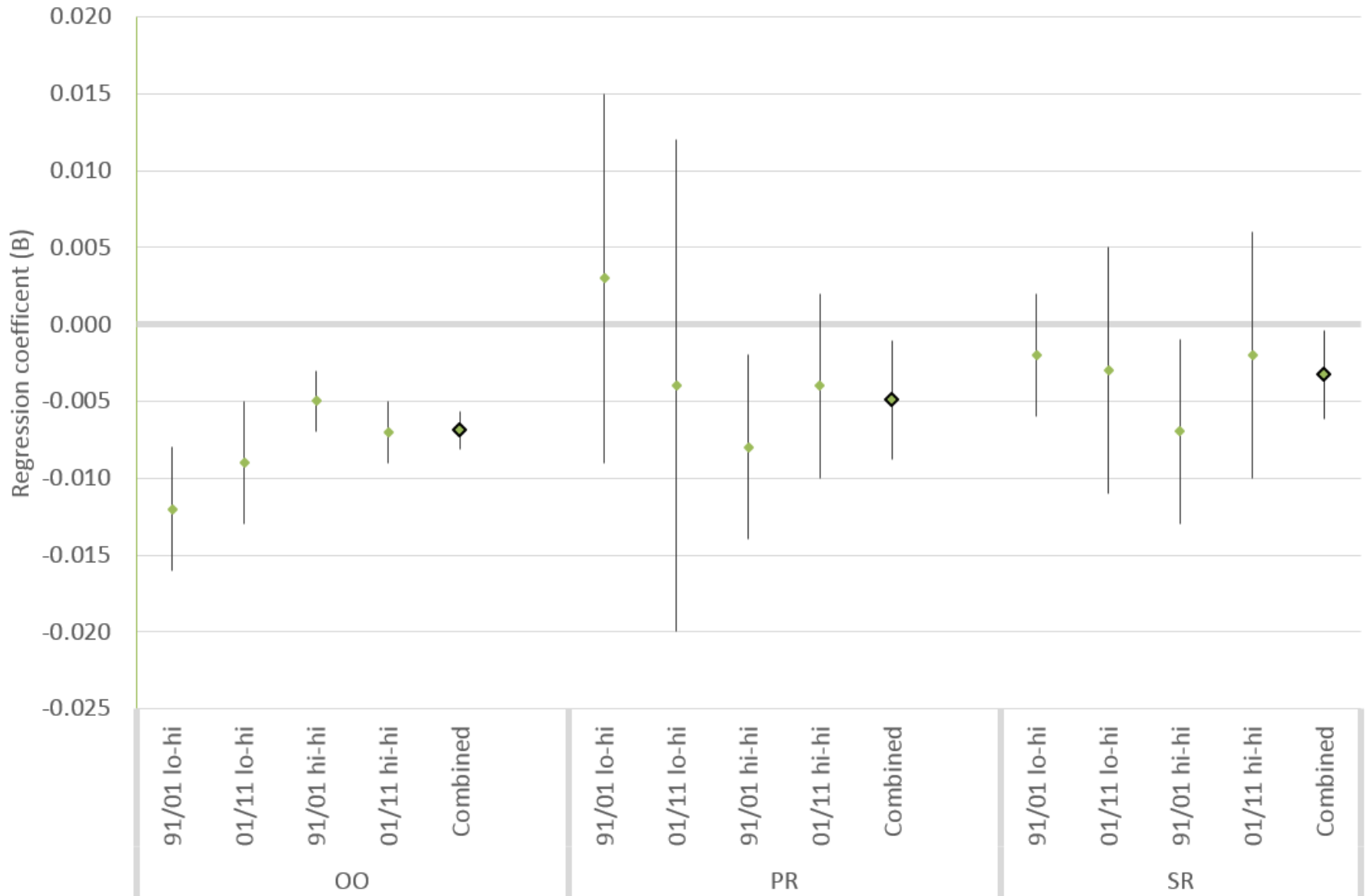
(2) High-High,  
1991-2001

(2) High-High,  
2001-2011



Results are author's  
analysis of SLS data

### (3) Linear regression with single linear term for deprivation



# 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.

# References

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