Growing Up in Ireland
National Longitudinal Study of Children

School social mix and junior cycle performance: are there cumulative effects?

Emer Smyth

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ESRI ECONOMIC & SOCIAL RESEARCH INSTITUTE
Trinity College Dublin The University of Dublin
An Roinn Leanaí agus Gnóthaí Óige Department of Children and Youth Affairs

Introduction

- Good deal of debate and research about whether the social composition of a school influences student outcomes
- Tend to focus on primary *or* second-level school levels
- Use a more dynamic approach, looking at whether moving into or out of schools with different social mixes makes a difference to Junior Certificate exam performance

Research literature

- Attempt to bridge two strands of existing research:

1. School social mix: higher achievement in high SES schools (Opendakker and Van Damme, 2001; Rumberger and Palardy, 2005)
2. Effect of primary and secondary school attended: both matter for achievement (Goldstein and Sammons, 1997; Sammons et al., 1995) v. fading (Pustjens et al., 2007)

- Explore the (individual and school) factors underlying any differences found

Data and methodology

- Waves 1, 2 and 3 of GUI Cohort ’98
- 9 year olds were sampled through the primary school system – surveyed children and their parents, classroom teacher and school principal
- Followed up at 13 and 17 years of age – approx. 6,000 young people and their parents, school principal
- Active school choice, especially at second level, with half of junior cycle students not attending their nearest or most accessible school
- Cross-classified models are therefore used to allow for complexity of transfers between primary and second-level schools

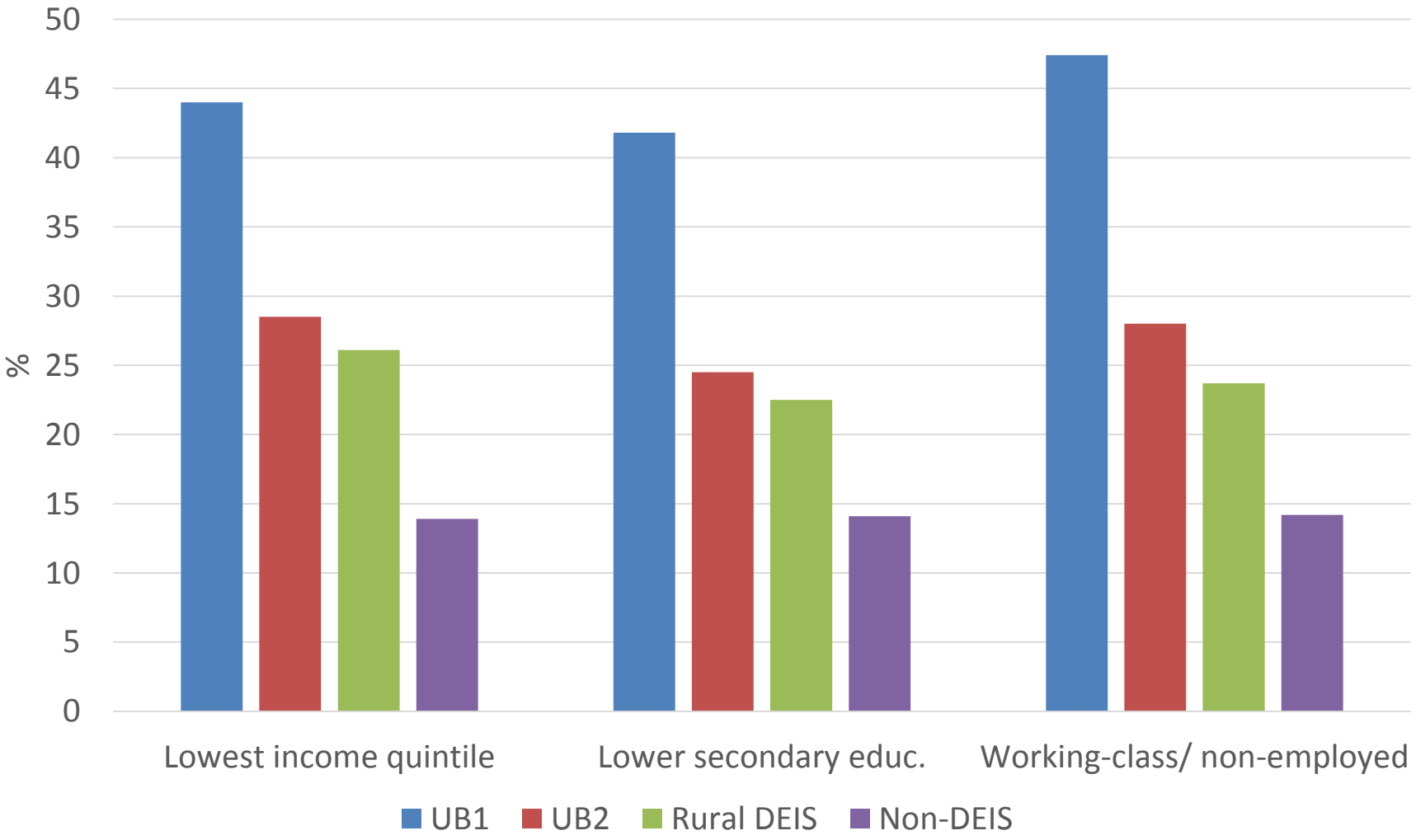
Social background variables

- Gender
- Social class (dominance; including non-employed)
- Mother's educational level
- Household income (equivalised; quintiles)
- Migrant family
- Lone parent (at age 9); at subsequent waves
- Urban/rural

School social mix

- Use school type as a proxy for social mix
- Primary level:
  - Urban Band 1 DEIS (most deprived)
  - Urban Band 2 DEIS
  - Rural
  - Non-DEIS (socially mixed)
- Second-level
  - DEIS or non-DEIS
  - Fee-paying schools

Social profile of primary schools

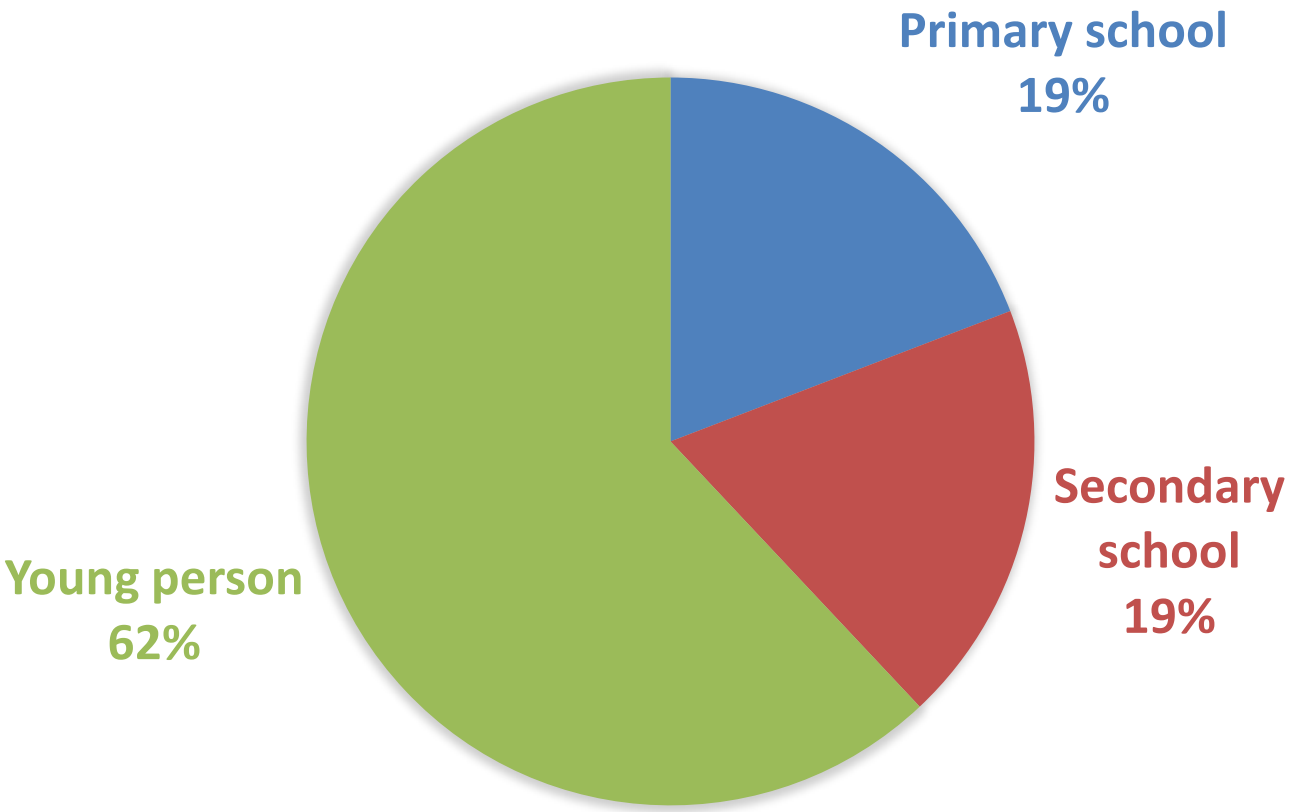


School dynamics: % attending a DEIS second-level school by social mix of primary school

Outcome: educational performance

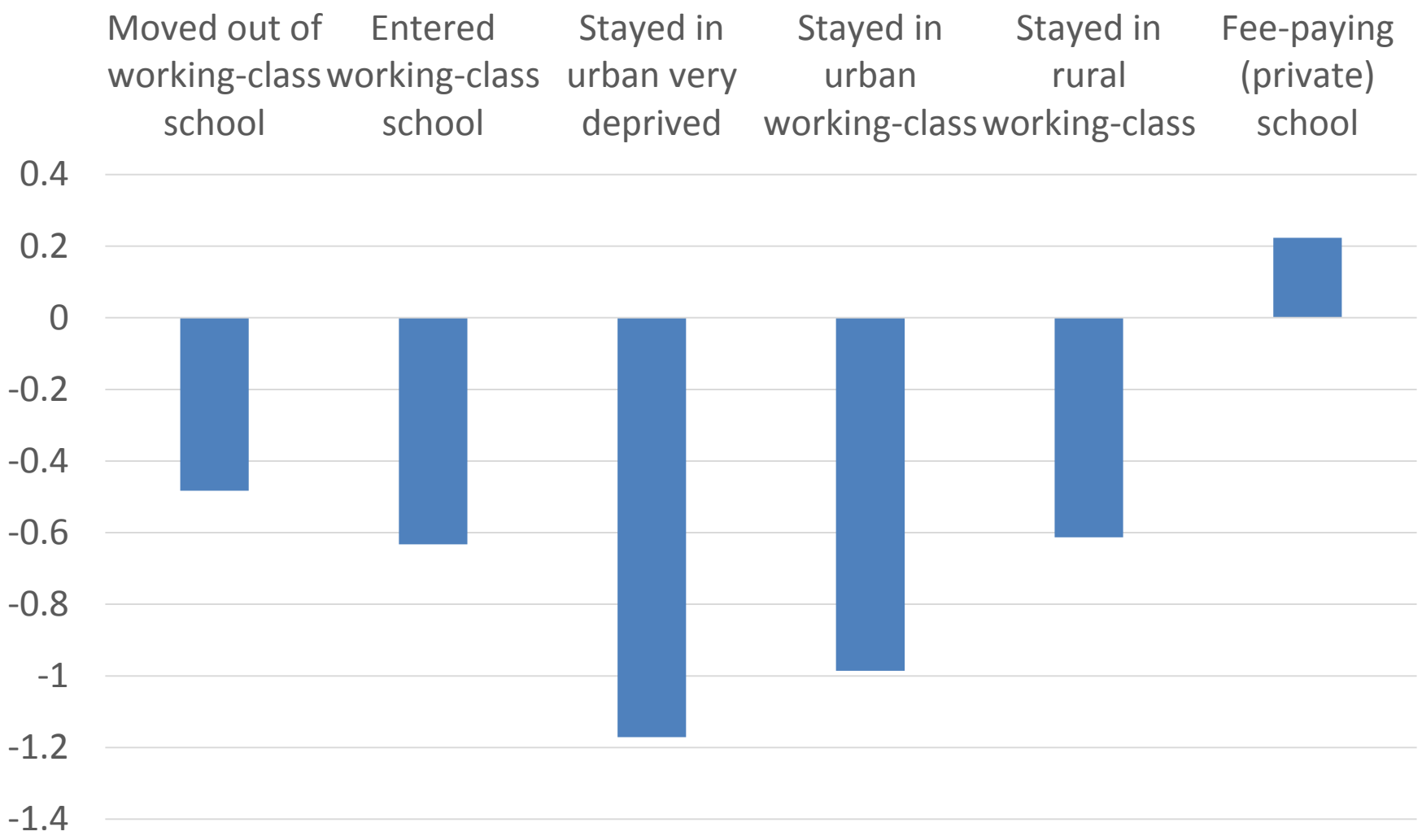
- Self-reported Junior Certificate exam performance (recorded at wave three)
- Assigned grade points for each subject taking account of level and grade (from 0 to 10)
- Averaged over all exam subjects taken (typically 10-11)

Null model: variance at different levels



Social background factors account for 34% of between-primary school variance and 39% of between-secondary school variance

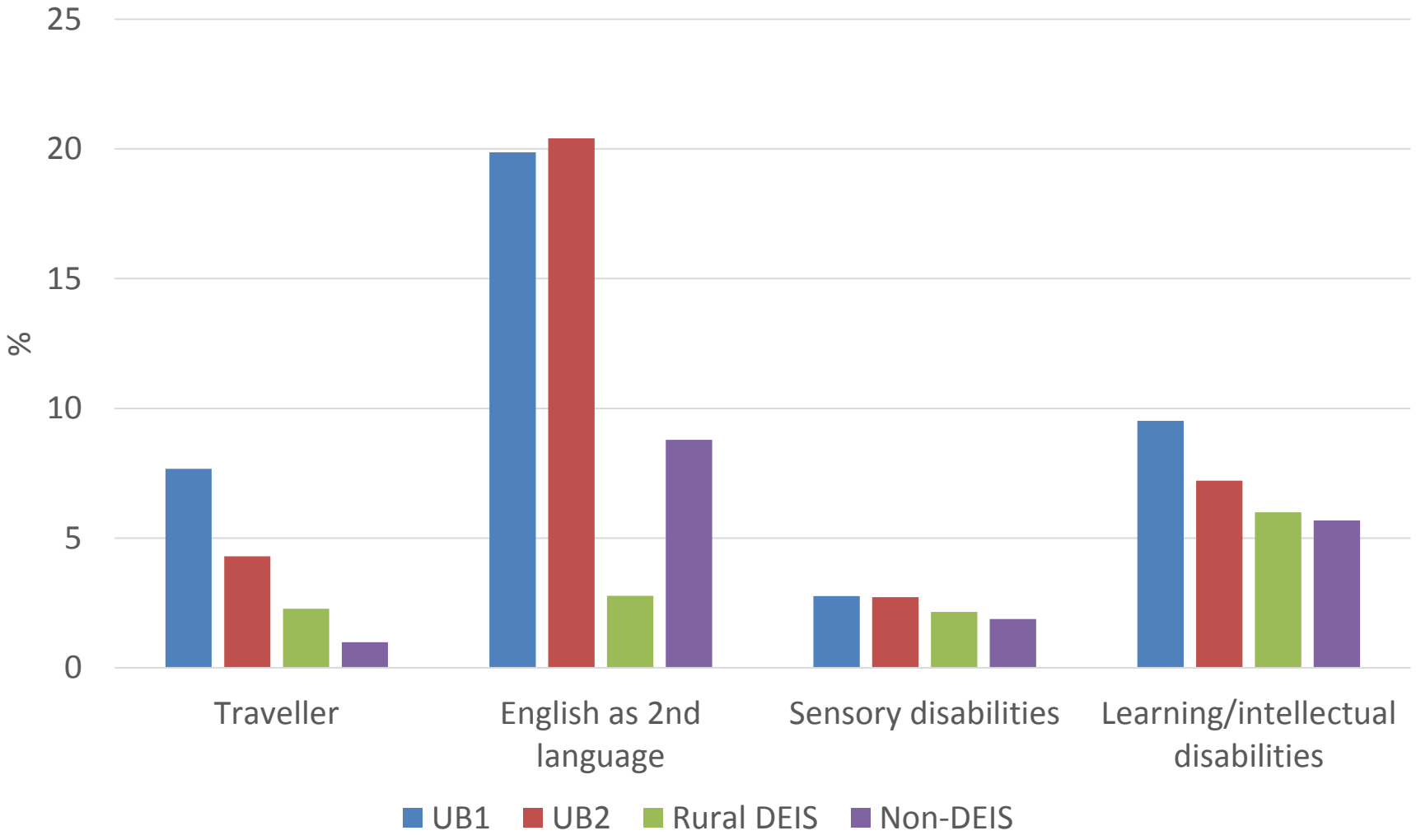
The dynamics of school social mix and exam performance (relative to staying in a mixed school)



Potential processes at primary level

- Teacher turnover
- % of significant non-attendance
- Complexity of need (SEN, Traveller, migrant)
- Child's attitudes to school (at 9)
- Reading and Maths test score (at 9)

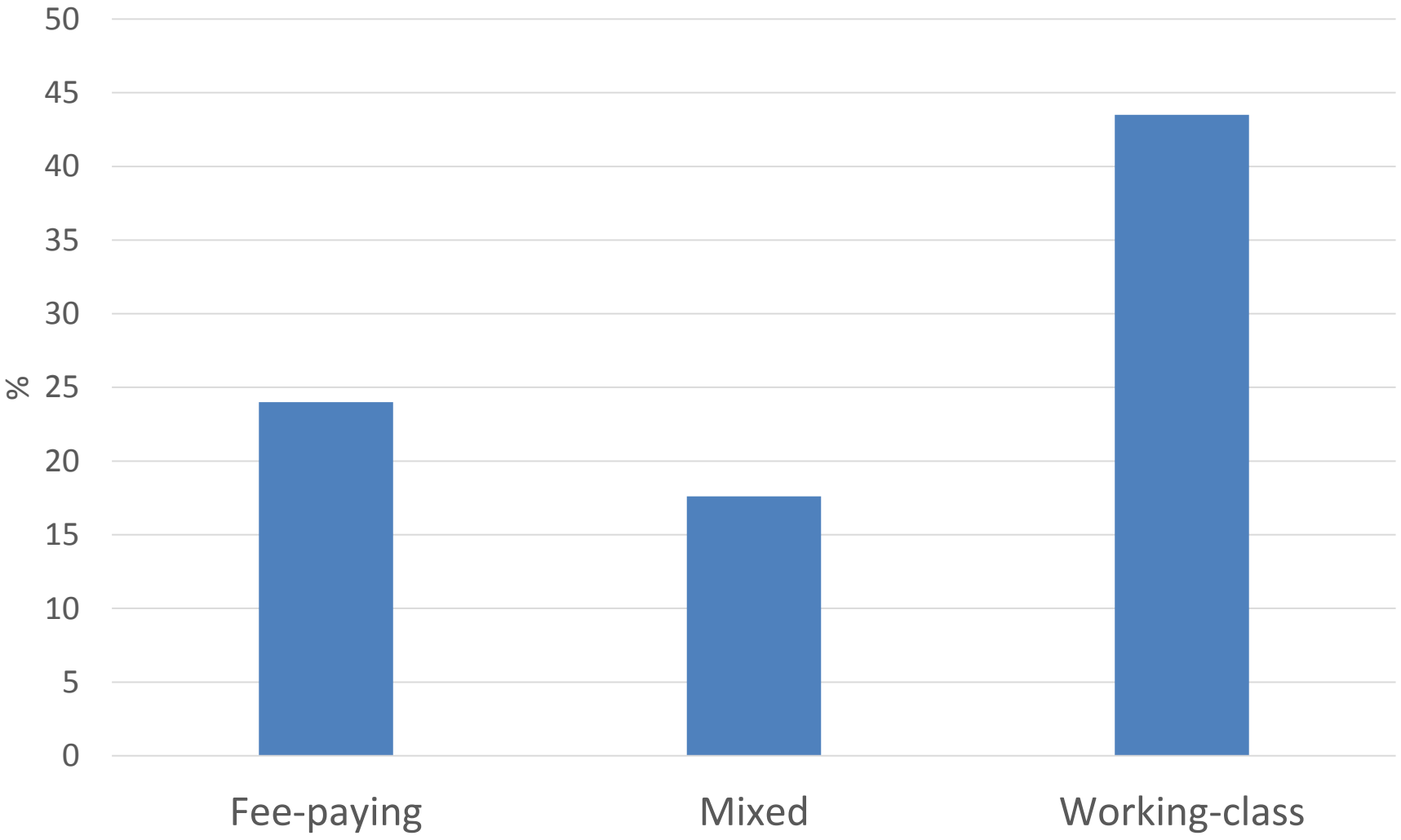
Complexity of need in primary schools



Potential processes at second-level

- % of significant non-attendance
- Complexity of need (SEN, Traveller, migrant)
- Use of rigid ability grouping (streaming)
- Quality of interaction with teachers (positive and negative) at 13
- Attitudes to school at 13
- Expect to go on to higher education at 13

Use of streaming by school social mix



Model results

Primary processes:

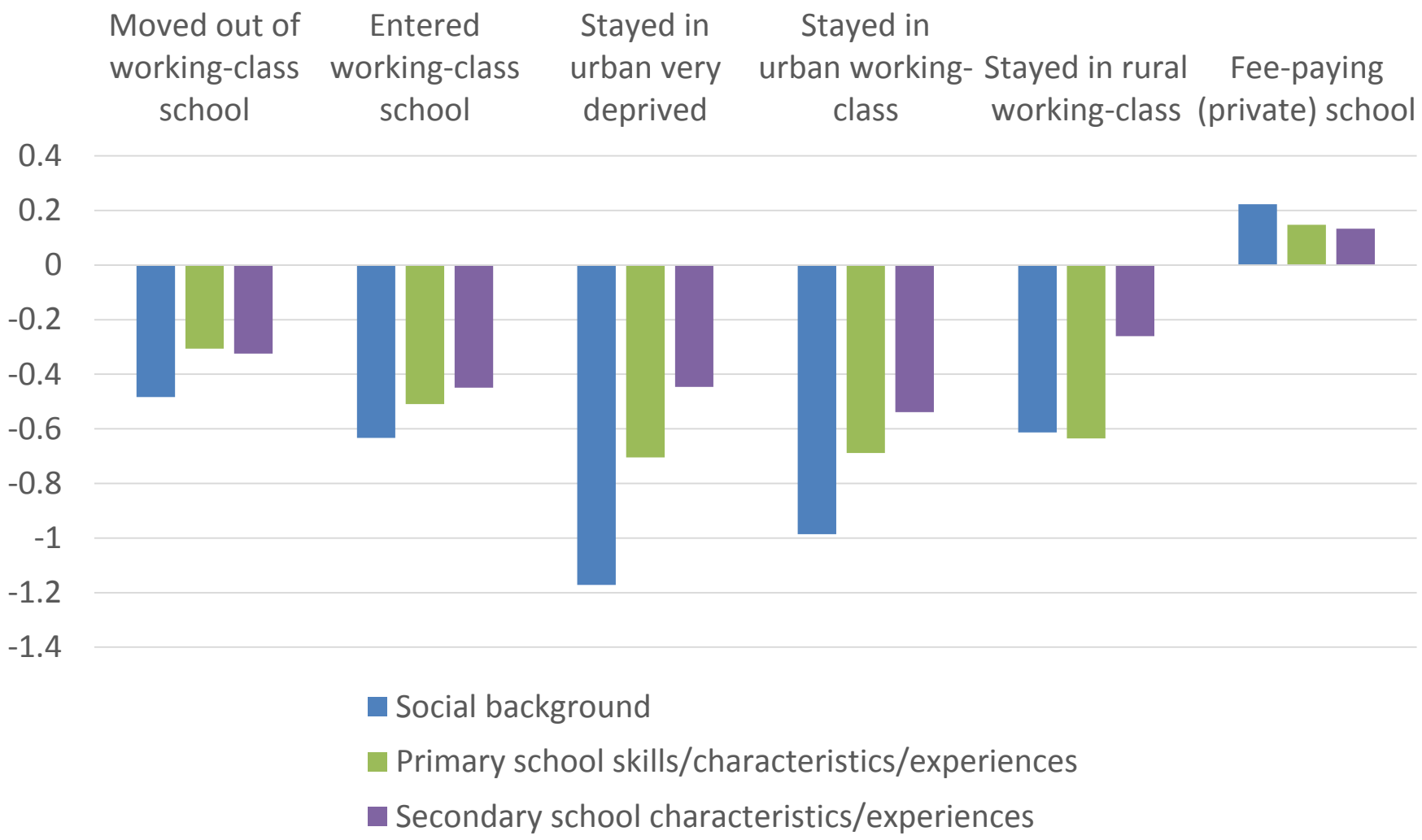
- Teacher turnover NS
- % of significant non-attendance (-)
- Complexity of need (SEN, Traveller, migrant) NS
- Child's attitudes to school (at 9) – never like (-)
- Reading and Maths test score (at 9) (+)

Model results (2)

Second-level processes:

- % of significant non-attendance (-)
- Complexity of need (SEN, Traveller, migrant) NS
- Use of rigid ability grouping (streaming) (-)
- Positive interaction with teachers at 13 (+)
- Negative interaction with teachers at 13 (-)
- Attitudes to school at 13 – like a bit or don't like/hate (-)
- Expect to go on to higher education at 13 (+)

Change in effects of social mix



Patterns by dynamics

- ‘Stayers’ in disadvantaged schools have lower grades (but not to the same extent in rural areas); effect is fairly large (=mother with postgrad degree v. JC)
- Partly related to achievement levels and attitudes developed at primary level but reinforced by second-level experiences
- Performance gap for moving ‘in’ (from a mixed to a working-class school) is similar to the ‘stayers’
- Those who move ‘out’ continue to have lower performance (largely a legacy of lower prior achievement)
- The fee-paying advantage is due to higher levels of achievement on entry

Conclusions

- School social mix has a significant impact on educational performance but the effect reflects the complex dynamics of movement between primary and second-level schools

- From a policy perspective, the findings highlight the way in which particular school practices can reinforce or counter inequality