Social mix in early education settings: does the diversity of local provision make a difference?

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Social mix in early education settings

- So far, researchers and policy makers, have focused mainly on:
 - Pedagogical practice
 - Staff qualifications and training
- Surprisingly little attention to peers:
 - Unlike fairly detailed evidence for school-age children

Today's questions:

1. To what extent are children clustered by income within pre-school settings in the year immediately preceding their first year in school?

2. Does (the diversity of) local provision make a difference to clustering?

Pre-school peer group in England: shall we expect high clustering?

Against clustering:

- 15 hours of entitlement: free for parents
- Almost universal attendance
- Uniform curriculum and inspection system

Reinforcing clustering:

- Different types of centres:
 - Different opening hours
 - Different fees for extra hours
 - Different staff
 - Different children's starting age

Data and measure of low income

- National Pupil Database: January 2011
 - Data on 617,579 three / four-year-olds
 - School year cohort born Sept 2006-Aug 2007
- Low income measure: future FSM status (in reception, Yr1 and Yr2)

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    Never FSM 77.1%
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- Once FSM 5.6%
- Twice FSM 6.0%
- Always (Thrice) FSM 11.4%

Outcome of interest: clustering

- For today, our outcome measure capturing clustering are:
 - If more than 33% of child's peers are always
 FSM = claim FMS in reception, Yr1 and Yr2

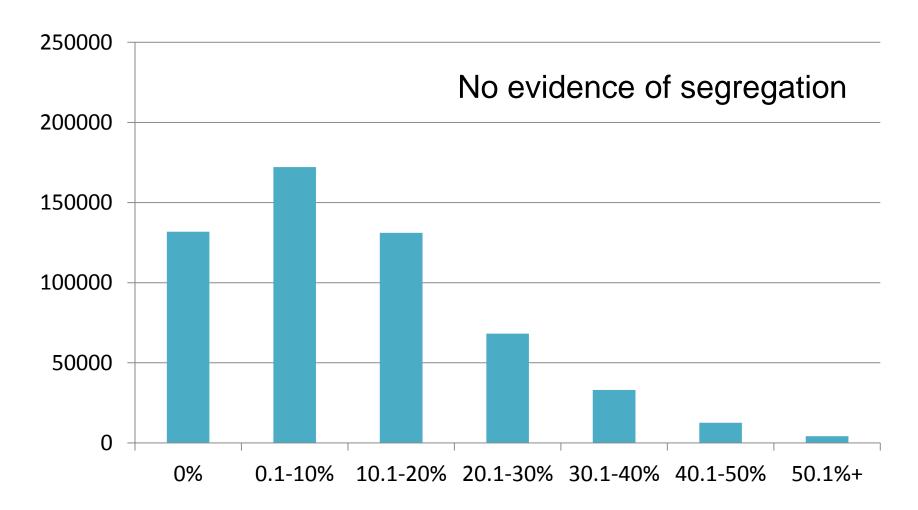
33%+ low income peers

If all of a child's peers are never FSM (=none claims FMS in either reception, Yr1 or Yr2)

No low income peers

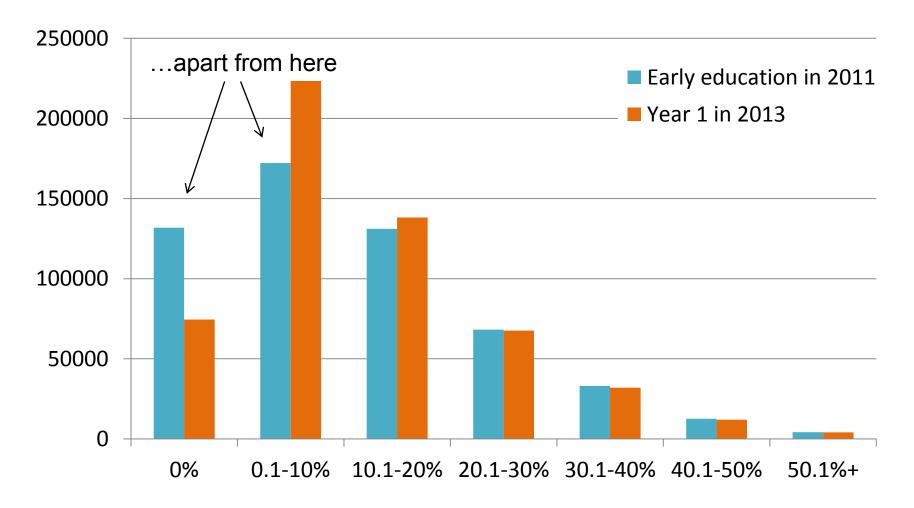
1. To what extent are children clustered by income within pre-school settings in the year immediately preceding their first year in school?

Proportion of peers who are low income



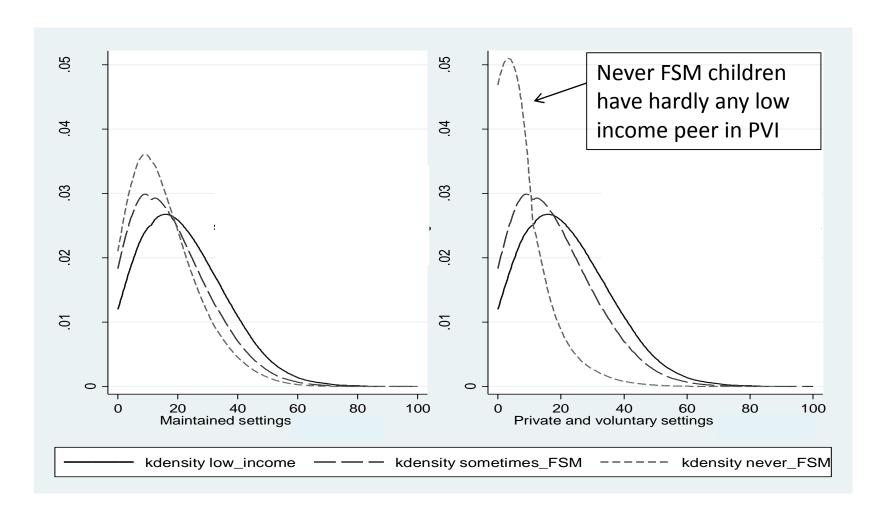
Low income=Always FSM Source: NPD 2011

Proportion of peers in early education who are low income: very similar to Yr1...



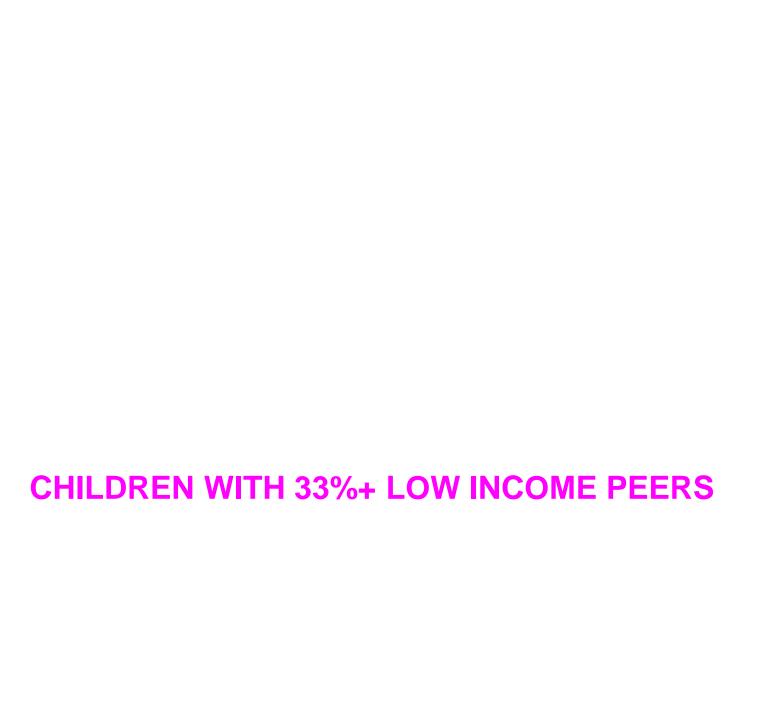
Low income=Always FSM Source: NPD 2011

Proportion of peers in early education who are low income: Maintained vs PVI

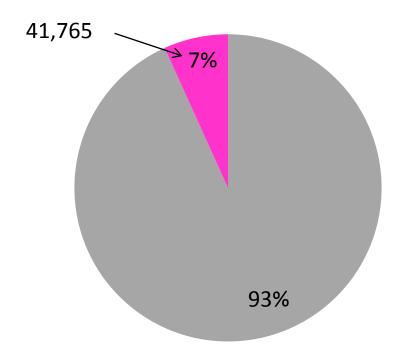


Today's questions:

- 2. Does (the diversity of) local provision make a difference to whether a child:
 - a. Has 33%+ low income peers
 - b. Has no low income peers



Children with 33+% low-income peers



■ Less than 33% of peers are low-income ■ More than 33% of peers are low income

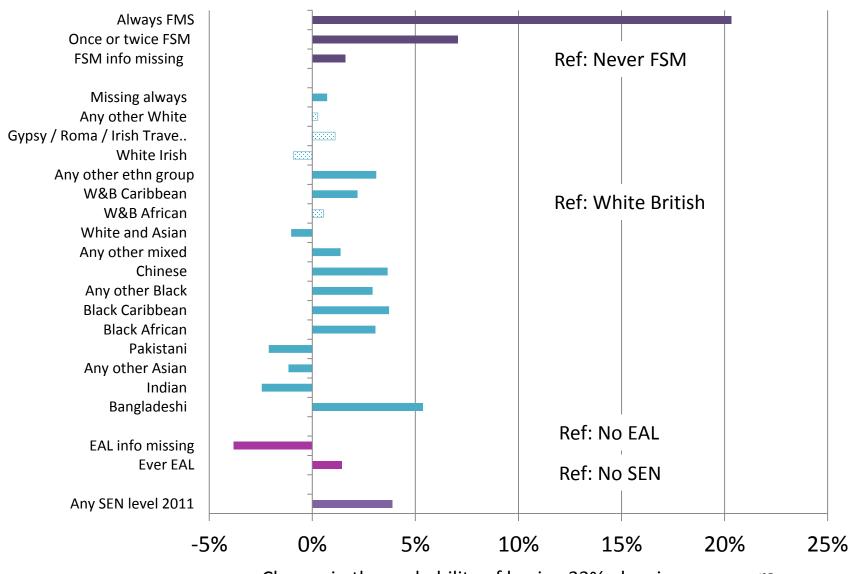
Children with 33+% low-income peers:

- Who are they?
- Where do they attend?

Children with 33+% low-income peers: Who are they?

We looked at key child characteristics in the data:

- Gender
- Month of birth
- SEN status
- EAL
- Ethnicity
- FSM status



Change in the probability of having 33%+ low income peers

Children with 33+% low-income peers: Who are they?

We looked at key child characteristics in the data:

- SEN status +
- EAL +
 - Ethnicity depends
- FSM status +

More likely for both groups who go on to do well in school (e.g.Chinese and Bangladeshi) and for those who consistently under attain (e.g. Black Caribbean children)

Children with 33+% low-income peers: Where do they attend?

Controlling for the key child characteristics in the data, we looked at:

- Setting's characteristics: type, Ofsted judgement
- Local authority characteristics: diversity of provision, number of settings per child, rural/urban
- Interplay between FSM status, setting's characteristics, and LA's characteristics

Children with 33+% low-income peers: Where do they attend?

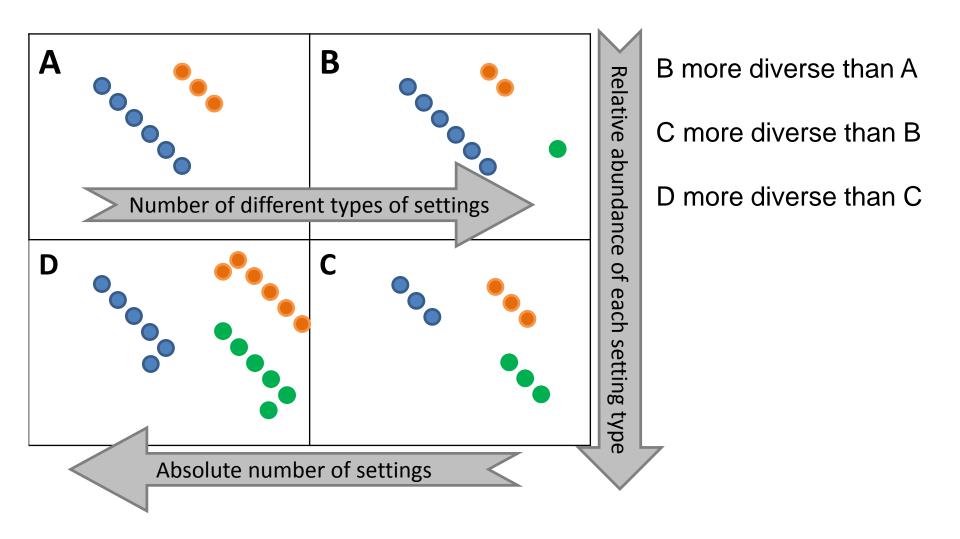
Controlling for all the child characteristics in the data, we looked at

- Setting's characteristics: type, Ofsted report
- Local authority characteristics: diversity of provision, number of settings per child, rural/urban
- Interplay between FSM status, setting's characteristics, and LA's characteristics

Setting type

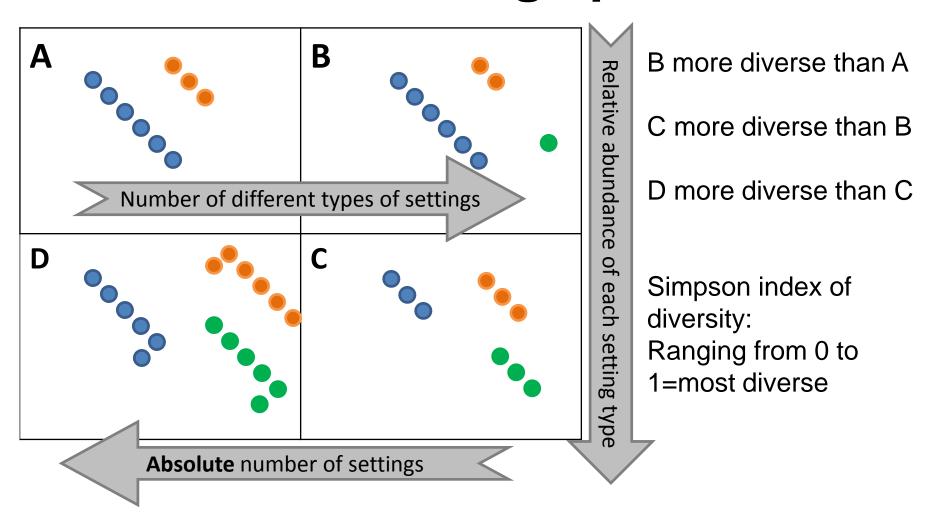
	% of children	N of children
Maintained	46.58	287,638
Childminding network	0.74	4,562
Independent school	2.82	17,401
SSCC (Main, satellite, private, voluntary)	2.14	13,233
Private day nursery	21.08	130,191
Private playgroup/preschool/nursery school	10.61	65,514
Voluntary day nursery	1.89	11,661
Vol playgroup/preschool/nursery school	12.26	75,718
Any other	1.89	11,661

Diversity of provision



Diversity of provision

+ number of settings per child

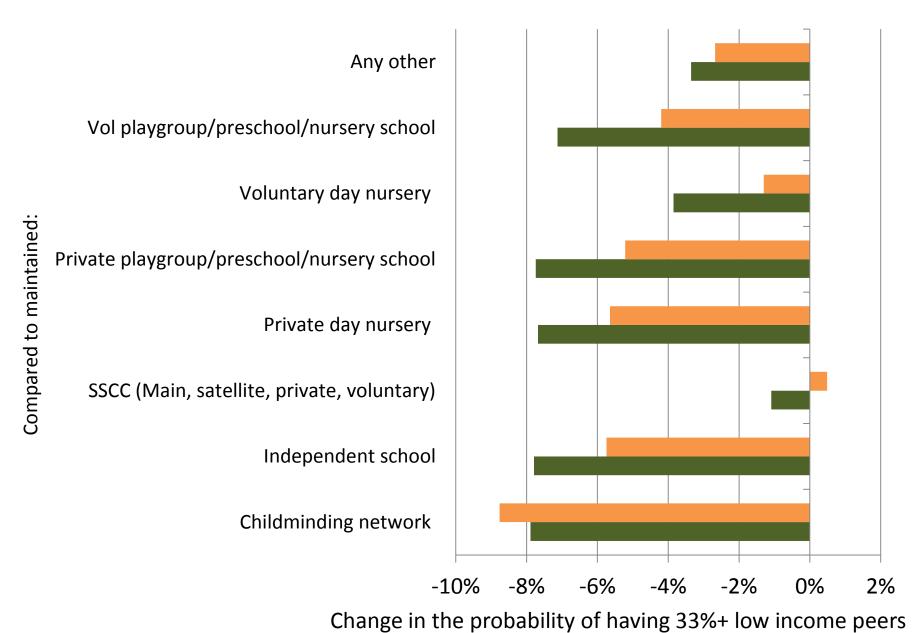


More or less likely to have 33%+ low-income peers?

Settings characteristics	
Setting type: any other than maintained	-
Ofsted: any other than outstanding	+
Local Authority characteristics	
Diversity	-
Number of settings per child	+
Predominantly urban	+
Urban with significant rural	+

More or less likely to have 33%+ low-income peers?

Settings characteristics	
Setting type: any other than maintained	_
Ofsted: any other than outstanding	+
Local Authority characteristics	
Diversity	-
Number of settings per child	+
Predominantly urban	+
Urban with significant rural	+



Taking into account all children's individual characteristics and Ofsted judgement

Children with 33+% low-income peers: Where do they attend?

So far we have shown that children:

- 1. in maintained settings
- in LAs with less diversity of settings and more settings per child

are more likely to have 33%+ low-income peers.

Diversity and number of settings per child pull in different directions...

- The more diversity there is in an LA, the less likely a child is to be in a setting with 33%+ low income peers
- BUT: the effect of diversity is stronger in LAs with higher number of settings per child

- The more settings per child there are in an LA, the more likely a child is to be in a setting with 33%+ low income peers
- BUT: the effect of number of settings per child is stronger in LAs with less diversity

...but partly offset each other

Children with 33+% low-income peers: Where do they attend?

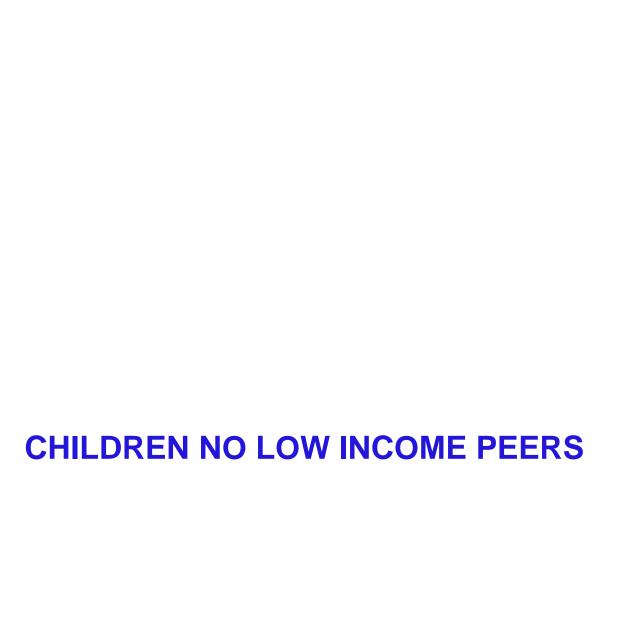
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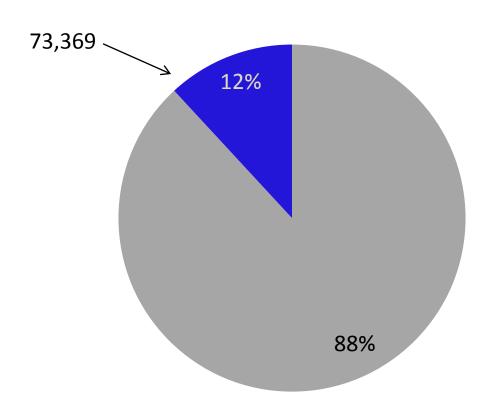
Diversity seems to matter even for children in maintained settings

- Children in maintained settings are more likely to have 33%+ of low income peers than children in other settings
- But for a child in a maintained setting, more diversity in the LA decreases the chances of having 33%+ of low income peers



Very quickly CHILDREN NO LOW INCOME PEERS

Children with 33+% low-income peers



■ With at least one low-income peer

■ With no low income peer

Children no low-income peers:

- Who are they?
- Where do they attend?

Children with no low-income peers: Who are they and where do they attend?

Children who are:

- Not from low income families themselves
- White

and attend in:

 Any type of setting other than maintained, but especially private day nursery and private playgroup/preschool

in LAs which have:

- Less diversity of provision
- Higher number of settings per child
- And are predominantly rural

Children with no low-income peers: Diversity and type of setting

 Whichever setting they are in, children in an LA with greater diversity of provision are less likely to have no low income peers than children in an LA with less diversity...

...except for children in private day nurseries – they
are more likely to have no low income peers, and
actually slightly more so in high diversity LAs.

Recap

- 1. To what extent are children clustered by income within pre-school settings in the year immediately preceding their first year in school?
- → Not much clustering of low income children, but more clustering among never FSM children than is the case in primary schools
- 2. Does (the diversity of) local provision make a difference to clustering?
- → Yes: high number of settings per child encourages sorting, but – surprisingly – diversity per se does not

Caveats and conclusions

- Our measure of diversity: reliable?
 - Careful construction of setting type, perhaps using setting features rather than setting classification
 - Possibly lower geographical level than LA
- This was 2011, the extension of the free (for working parents) entitlement is likely to change things
- If encouraging more mixing is a policy objective:
 - Diverse provision can be encouraged and this may required tailored support for different types of settings
 - Stronger (financial) incentives for settings with exclusively "not low income" intake are needed

Thank you!

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ADDITIONAL SLIDES

Who are the children more likely to have 33%+ low-income peers?

Settings characteristics	
Setting type: any other than maintained	-
Ofsted: any other than outstanding	+
Local Authority characteristics	
Diversity	-
Number of settings per child	+
Predominantly urban	+
Urban with significant rural	+

Who are the children more likely to have 33%+ low-income peers?

Settings characteristics	
Setting type: any other than maintained	-
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Local Authority characteristics	
Diversity	_
Number of settings per child	+
Predominantly urban	+
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 Interaction between diversity and number of settings, plus interpretation.

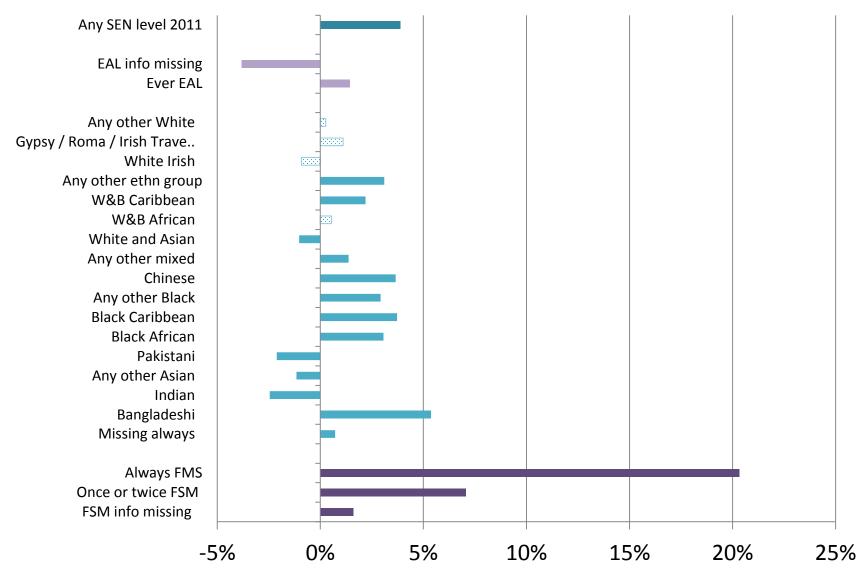
- And then all over again for never FSM peers
- (but without the detour to explain the vars)

Additional slides/scraps

Children with 33+% low-income peers: Where do they attend?

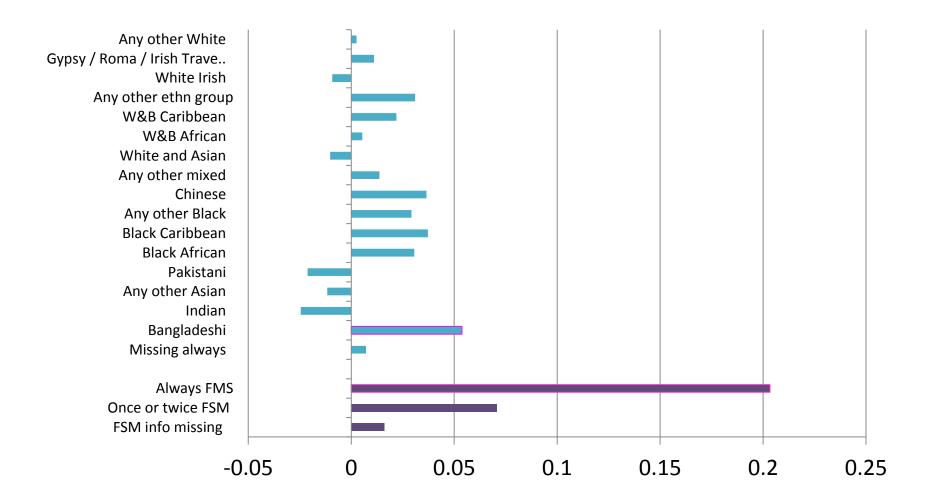
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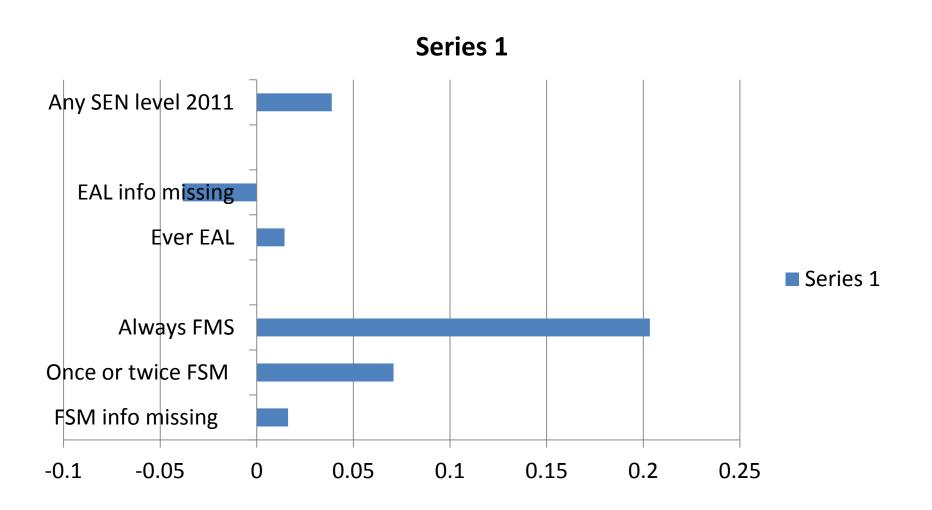
- Setting's characteristics:
 - Type: children less likely to have 33%+ always FSM peers when in every type of setting other than maintained
 - Ofsted judgement: children more likely to have 33%+ always FSM peers when in every type of setting other than outstanding
- Local authority characteristics: diversity of provision, number of settings per child, rural/urban
- Interplay between setting's and LA's characteristics

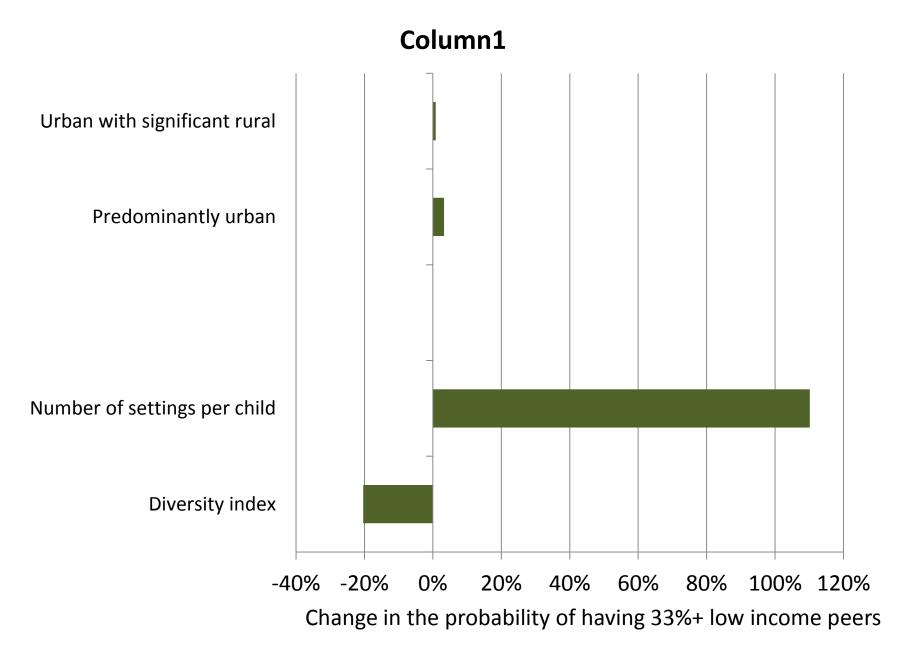


Change in the probability of having 33%+ low income peers

Diversity of provision







Taking into account all children's individual characteristics

