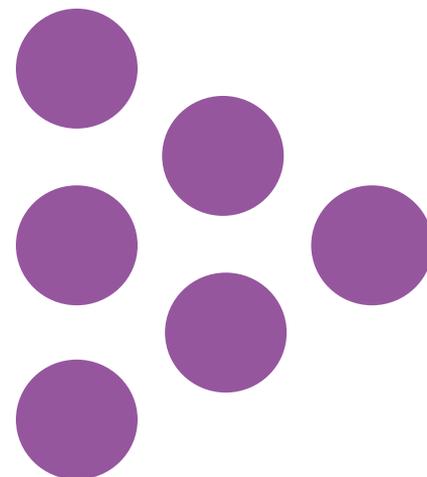

School Funding and the Relationship with Outcomes

The school funding and finance conference 2018

Dr Angela Donkin – Chief Social Scientist



Our Mission

The lives of children and young people worldwide are inextricably linked to the amount and quality of education they receive.

At NFER our mission is to improve outcomes for future generations everywhere and to support positive change across education systems.

We do this by creating and sharing research evidence and insights on education policy and practice, informing policy makers and other key decision makers, and strengthening practice in the classroom.

What we do

We use our expertise to produce high-quality, independent, research and insights to inform key decisions makers about issues across the education system.



Accountability



Classroom Practice



School Workforce



Assessment



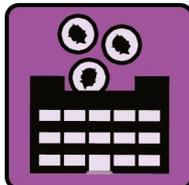
Social Mobility



Systems and Structures



Education to Employment



School Funding

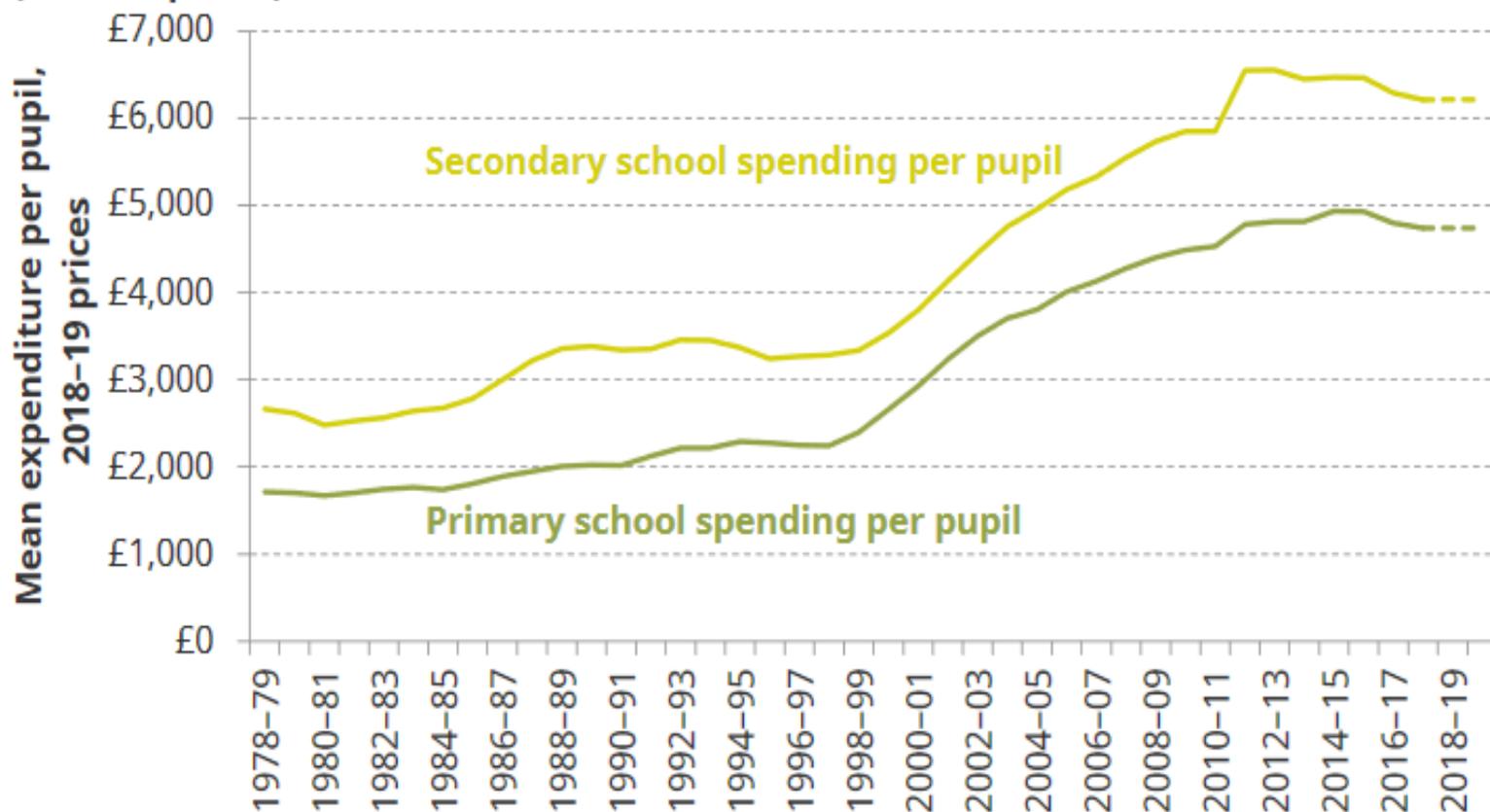
School funding

This presentation will examine:

- **how school expenditure and costs have changed over time**
- **how schools are responding to changes in their budgets**
- **what effect the available evidence tells us such changes can have on educational outcomes**
- **how the effects on attainment appear to vary by disadvantaged**

How has per pupil school funding changed in real-terms?

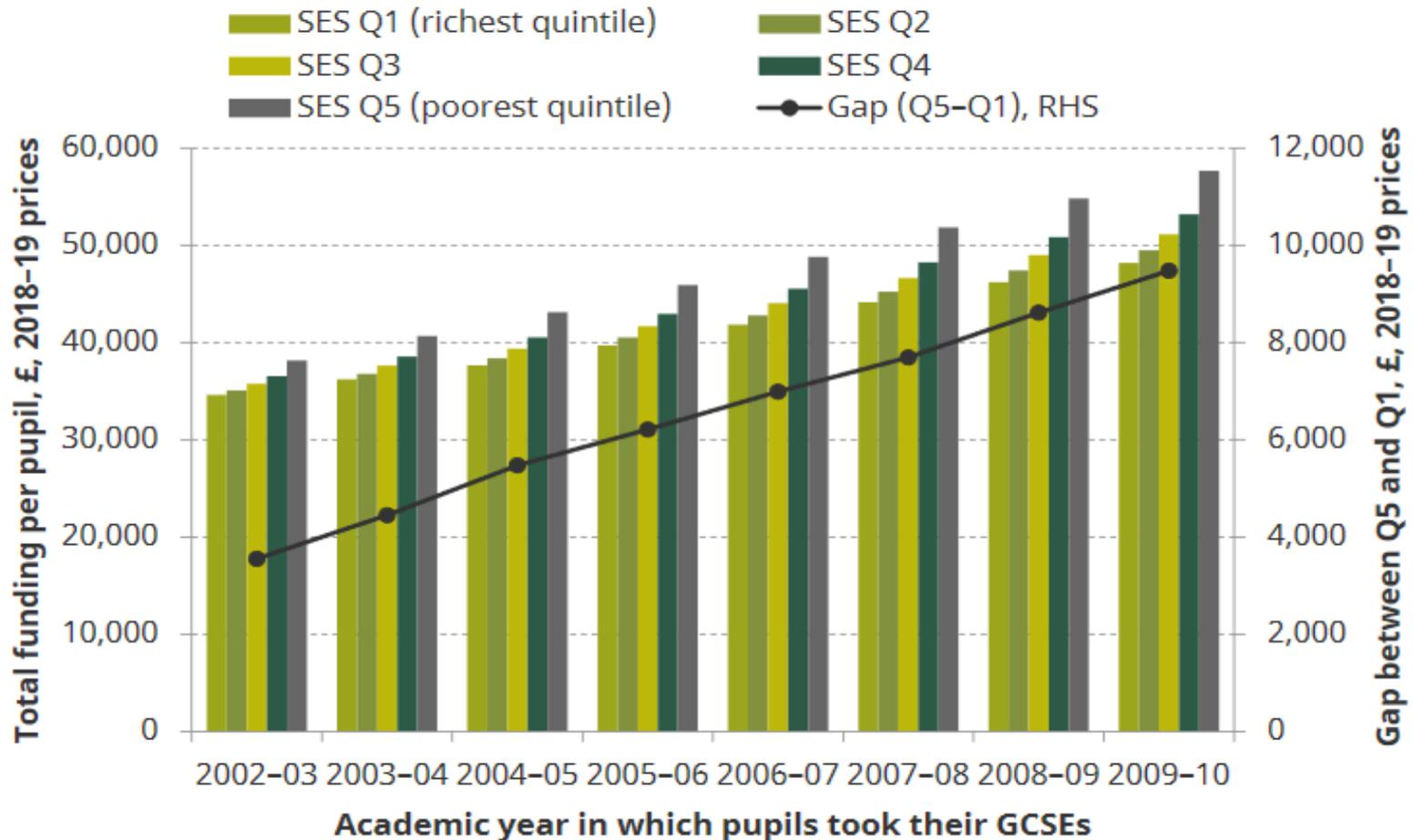
Figure 3.1. Spending per pupil in primary and secondary schools, actual and plans (2018-19 prices)



Source: IFS, 2018

Funding is targeted towards disadvantaged pupils and schools

Figure 2. Socio-economic differences in total school funding per pupil by year in which pupils took GCSEs



Source: IFS, 2018

Alongside falling per pupil funding, schools are also facing higher costs

This includes:

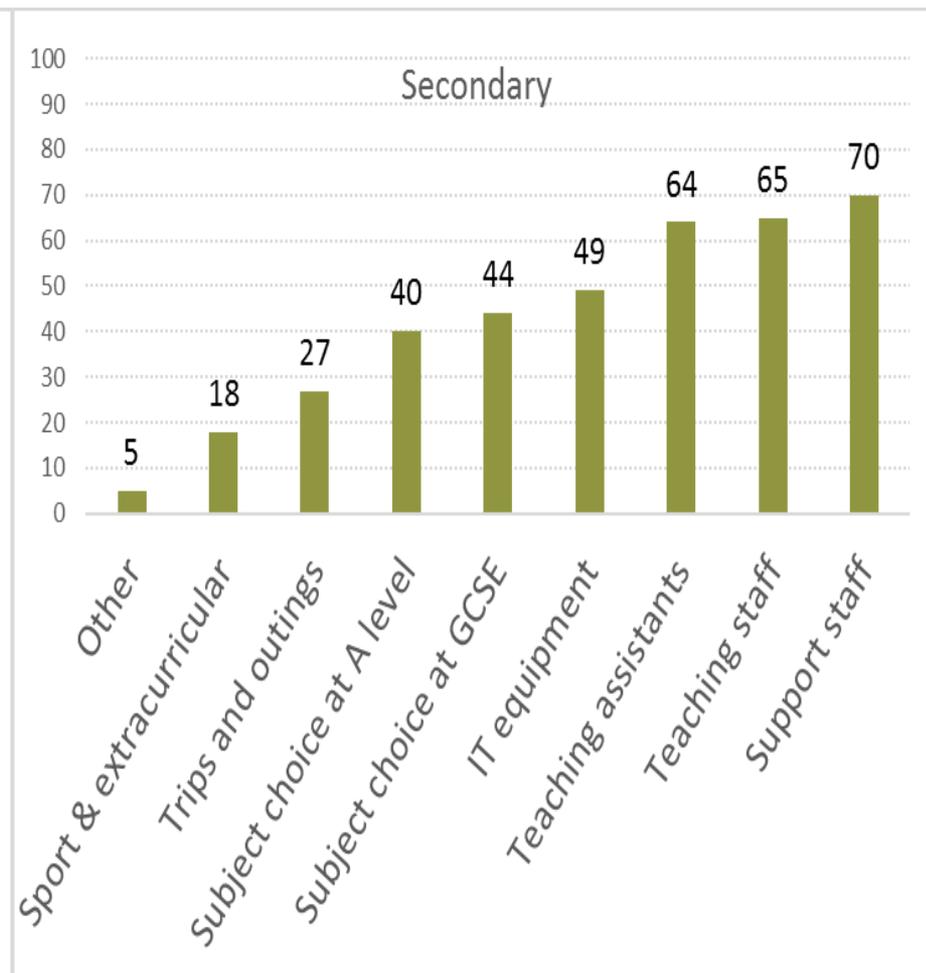
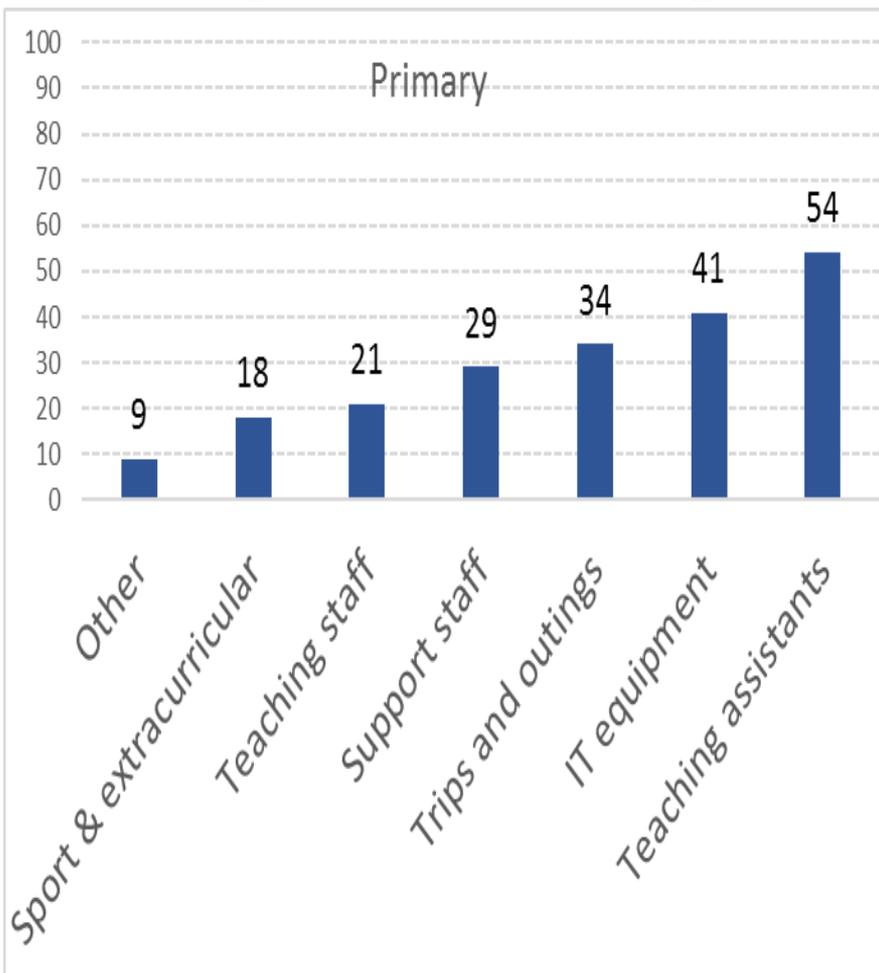
- **pay increases for teachers on the main pay scale, the upper pay scale and school leaders of 3.5%, 2% and 1.5% respectively**
 - **While DfE announced £508m of funding to help cover this cost, the funding assumes schools have already budgeted for a 1% pay rise and that the average rise in staff costs will be approx. 2.9%.**
 - **As schools with a high proportion of disadvantage pupils tend to struggle to retain experienced teachers and also hire younger teachers, they are likely to have more teachers on the main pay scale. As such, the funding is less likely to cover their full rise in staff pay.**

Alongside falling per pupil funding, schools are also facing higher costs

- **increased employer National Insurance Contributions (of approx. 3.4%)**
- **increased employer pension contributions (TBC but potentially rising from 16.48% in 2015 to approx. 23% by 2020)**
- **increases to the national minimum wage**
- **introduction of the apprenticeship levy: organisations with an annual pay bill exceeding £3m must pay a levy equal to 0.5% of their pay bill**

NAO estimated in 2016 that in order to maintain per pupil funding given these increased costs, schools would need to save around £3billion.

How have schools responded to tighter budgets?



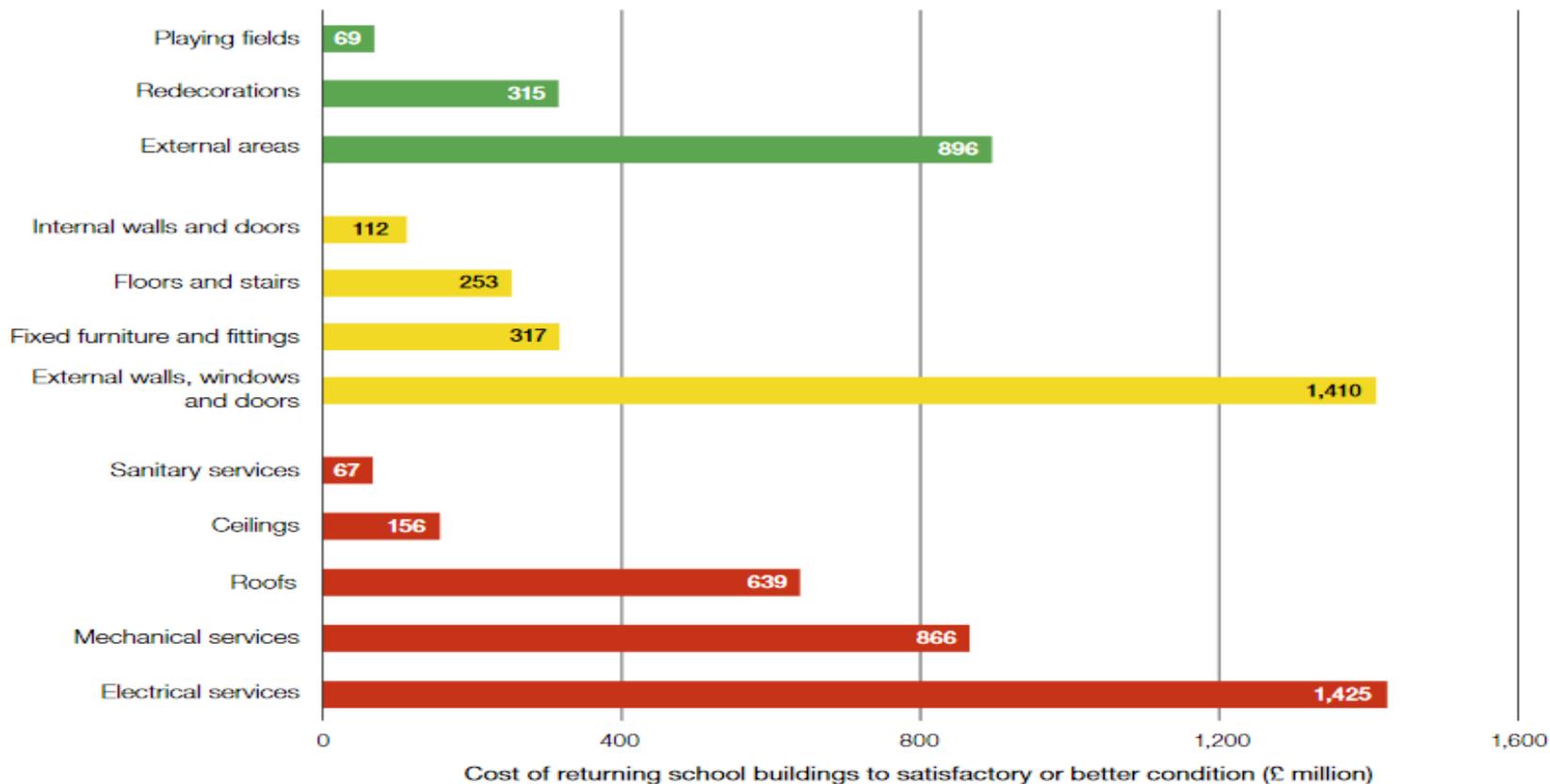
Source: NFER Teacher Voice Survey 2017

Capital funding

Figure 8

Estimated cost of returning the school estate to satisfactory condition or better by building element

The most funding will be needed to repair electrics and external walls, windows and doors



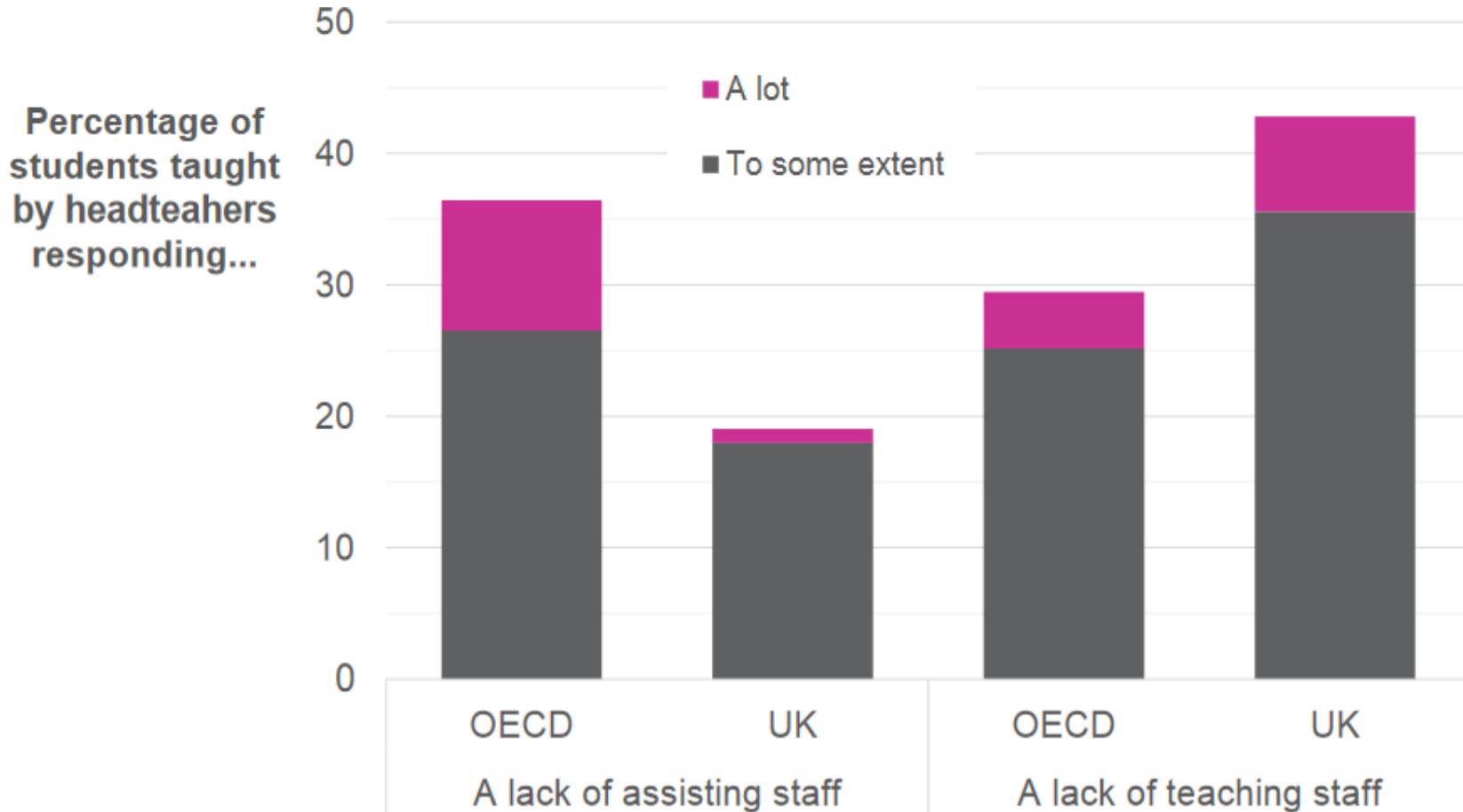
Source: Capital Funding for School, NAO, 2017.

% of pupils in schools where the headteacher reports infrastructure is hindering performance to at least some extent

| | England | OECD average |
|--|---------|--------------|
| A lack of physical infrastructure | 48% | 36% |
| Inadequate or poor quality physical infrastructure | 45% | 35% |

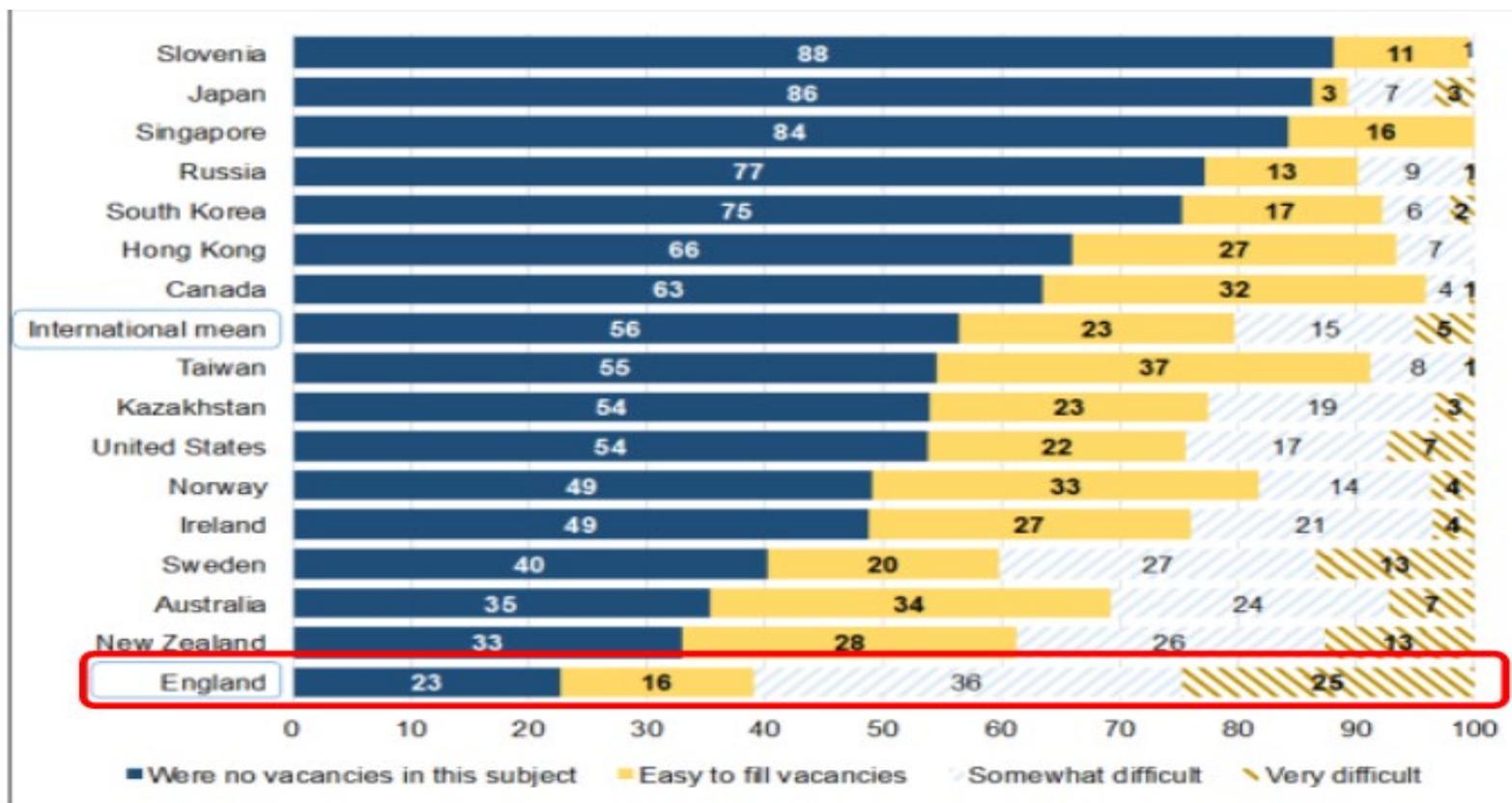
Source: PISA 2015 National Report

Lack of teachers (but not teaching assistants) is a key challenge hindering performance in the UK



Source: OECD, PISA 2015, Table II.6.14

Most headteachers in England report recruitment difficulties



Percentages of year 9 pupils taught in schools according to the level of difficulty in filling maths vacancies

Source: TIMSS 2015 national report for England, Figure 75

How does funding impact on attainment?

Robust studies that provide estimates suggest that additional school resources have *at least* a modest positive influence on attainment.

The size effect varies: from around 2003 onwards, estimates range from the equivalent of increasing test scores (marked out of 100) from 50 points to 50.5-51.5 points, to a rise from 50 to 60-62 points.

LSE academics finds that in urban schools, a £1,000 increase in per pupil expenditure per year throughout primary school increases test scores at the end of primary school from approx. 50 points to 62 points.

In the main, the effects are only found to be significant in studies examining primary schools. This may either:

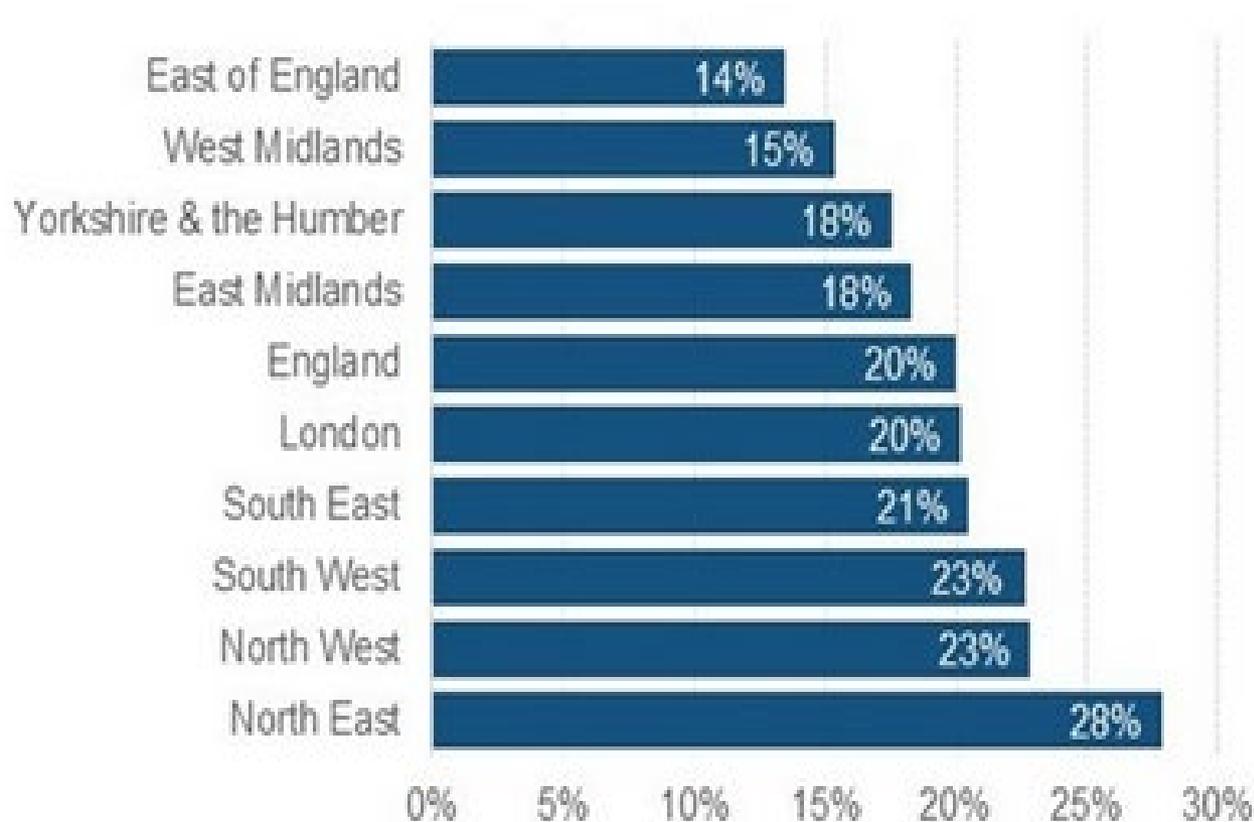
- **suggest spending cuts at this level are especially detrimental, or**
- **reflect the fact that most studies using strong methodology look at primary school data**

How does funding impact on attainment?

Importantly, the observed benefits of higher spending are typically greater for pupils from disadvantaged backgrounds:

- an increase in expenditure of £1,000 leads to a greater improvement in test scores of disadvantaged pupils than non-disadvantaged pupils (of approx. 0.43-0.5 standard deviations compared to 0.3 standard deviations)**
- the effects of expenditure are found to be higher and more significant in schools with more disadvantaged students.**
- all types of students in the most disadvantaged schools appear to benefit from additional funding, not just the disadvantaged students**

Schools using the pupil premium to plug gaps in their school's budget



Source: NFER Teacher Voice Survey 2017

Conclusions

-
- **Real-terms per pupil funding has fallen since 2015**
 - **School's costs are rising**
 - **School's are struggling now with issues such as recruitment and are facing tough choices over where to make cuts**
 - **Economic analysis tells us that funding does impact on attainment (although the size of the effect found does vary)**
 - **England targets more funding at disadvantaged pupils than non-disadvantaged pupils, and funding changes appear to impact most heavily on the attainment of disadvantages pupils.**
 - **Government funds are limited but before freezes/cuts are made we need more evidence on where funding has the most impact.**

Evidence for excellence in education

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