



# FLAT REGIONAL PAY LEADS TO UNEVEN PERFORMANCE IN THE CLASSROOM

Teacher wages are negotiated through national wage bargaining in England, and consequently exhibit little regional variation. **Jack Britton** and **Carol Propper** investigate whether this flat wage structure across the country has adverse consequences for school performance.

**National wage bargaining is a prominent feature of public service provision in England** and frequently results in wages that are flat across regions. This is in stark contrast to the private sector, where wages vary to compensate for differences in the cost of living, quality of location and amenities across regions. The lack of variation in wages in the public sector means public sector employees' relative spending power will differ across the country. If wages are important for their performance, this may affect the quality of service provision.

The subject has received considerable attention from the coalition government, with Chancellor George Osborne writing to the pay review bodies in December 2011 arguing that pay for teachers, nurses, police, prison officers, doctors, dentists and member of the armed forces should be more reflective of local labour markets. Osborne claims "there is substantial evidence that the differential between public and private sector wages varies considerably between local labour markets. This has the potential to... lead to unfair variations in public sector service quality."

While it is true that the public-private sector wage differential does vary

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considerably – for example the difference between teacher wages in the North and London is around nine percent while the equivalent difference in the private sector is around 30 percent – evidence that this contributes towards differential quality in service provision in limited.



One study to date has shown that centralised pay regulation of nurses resulted in patients being more likely to die from heart attacks after admission to hospital in areas where nurse wages were relatively worse (Propper and Van Reenen 2010). Our work aims to contribute to the debate on national wage bargaining for public sector employees by investigating whether there is an adverse effect on pupil performance from pay regulation for teachers.

We examine the relationship between what a teacher would be paid in the private sector (the outside local labour market wage) and the performance of schools. We focus on school performance in the key GCSE exams taken at age 16. We allow for variable quality of intake by looking at the 'value added' to a pupil by the school, which compares how pupils have done relative to other pupils who achieved similar Key Stage 2 scores across the country. We also allow for the very different composition of students in school across the country.

Overall we find a significant negative relation between local labour market wages and school performance, meaning schools perform relatively worse in areas where local labour market wages are higher. We find



that a 10 per cent increase in local labour market wages is associated with the loss of one GCSE point per pupil – this is equivalent to every pupil losing one GCSE grade in one subject. This effect is roughly equivalent to the effect of increasing school class sizes from 30 to 34.

The relationship between local labour market wages and school performance could work through increased vacancies, through lower quality hires, or through reduced teacher effort (we reject the hypotheses that it is working either through the pupil or through the parent).

Our calculations suggest that around one third of the effect might operate through difficulties with recruiting, while the remainder works through a lack of quality teachers and through reduced effort. A reason why this might matter is that a large proportion of work teachers do is discretionary; time spent lesson planning, engaging with pupils or organising extra-curricular activities may be lower under the disaffected teacher.

The implications are that wages are too low in areas of the country where living costs are high. One persistent objection to this policy conclusion is that raising

wages for teachers in these areas would redirect resources away from already impoverished areas. However, a high outside wage area is not necessarily one in which there are more wealthy students in state schools, since the use of private schools is also higher in these areas.

Furthermore, we find ‘non-linearity’ in the

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relationship between outside wages and school performance. The largest losses in pupil performance occur in areas which have had high private sector wages over a long period and these losses are not offset by gains in low outside wage areas.

The implications of this are that if teacher wages were lowered in the low outside wage areas and increased in high outside wage areas, performance in schools in low outside wage areas would not change that

much, whilst performance in schools in high outside wage areas would increase.

Simple back of the envelop calculations suggest that overall performance of schools could be improved with a simple restructuring of the current wage budget: our estimates suggest that an additional 11,000 pupils could attain five A\*-C GCSE grades across the country with a cost neutral strategy. An overall increase in the teacher wage budget could yield higher still returns and could also be used to address the equity issues which would arise from reducing wages in the low outside wage areas in these already tough times.

This article is based on the CMPO working paper 12/239 ‘Does Wage Regulation Harm Kids? Evidence from English Schools’ by Carol Propper and Jack Britton (<http://www.bristol.ac.uk/cmppo/publications/papers/2012/abstract293.html>).

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### References

Propper, C. and van Reenen, J. (2010) ‘Can Pay Regulation Kill? Panel Data Evidence on the Effect of Labour Markets on Hospital Performance’, *Journal of Political Economy*, 2010, vol. 118, no. 2