The public-private sector pay differential in the UK

Jonathan Cribb, Richard Disney, Carl Emmerson and Luke Sibieta

Institute for Fiscal Studies

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The most recent published analysis by the IFS of the pay differential between the public and private sector, controlling for differences in the composition of the workforce, was contained in the February 2013 Green Budget (Crawford, Cribb and Sibieta 2013). This brief note updates that analysis of the public sector pay differential using the latest figures. We set out our methodology below.

We use Labour Force Survey data to estimate the percentage difference between hourly pay in the public and private sectors controlling for a number of background variables, in order to capture differences in the composition of workers in the public and private sectors. This is estimated by regressing log hourly wages on a public sector indicator, controlling also for highest qualification (higher degree, degree, nondegree higher education qualification, A level (or equivalent), GCSE (or equivalent), any other qualification or no qualification); dummies for 12 regions of the UK; dummies for the quarter of the year the individual is observed; age and age squared; experience (calculated as Age – Age left education) and experience squared, both of which are interacted with a three-category qualification variable (indicating higher education, secondary education or other/no education).

Hourly wages are calculated using usual hours as reported by the survey respondents. We also trim the data, removing the lowest 1% of wage earners in each year as they report hourly wages so low as not to be credible. We remove those observations in the top 1% of the wage distribution only if they have report working 10 or fewer hours a week, as the low hours lead to estimating implausibly high hourly wages. The regressions are estimated by Ordinary Least Squares, are weighted using LFS income weights and standard errors are robust to heteroskedasticity. Given that there are few public sector workers over the age of 59 and under the age of 20, we restrict attention to those aged 20 to 59. The model is estimated separately for men and women.

It is possible that these estimates are capturing unobserved differences between public and private sector workers, and therefore do not reflect a true pay 'premium' per se. There are also other elements of remuneration, such as pensions, benefits in kind or holiday that may differ across public and private sectors. Therefore, as we have argued before (see Crawford, Cribb and Sibieta 2013), the focus of our analysis is not on the level of the estimated public-pay differential, but how it changes over time.

Figure 1 below sets out the estimated public-private hourly wage differential since 1999. Each data point is based on a four quarter LFS sample, ending in the labelled quarter. The dashed lines represent the 95% confidence interval.

Figure 1 makes it clear that in the period after the financial crisis in 2008, the estimated public sector wage differential rose relative to the private sector for both women and men. In 2007–08, it was 5.8% for women and -1.4% for men, rising to respective recent peaks during 2011 of 9.1% for women and 1.7% for men. It has since fallen back and in the year to 2013Q2 (the latest data) is estimated to be 8.4% for women and -0.4% for men. For both men and women, it is still above the level estimated in 2007–08, although it is closer to the pre-crisis level for men than it is for women.



Figure 1 Estimated average public-private hourly wage differential over time

Notes: Authors' calculations using Labour Force Survey Data, multiple years

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References

Crawford, R., Cribb, J., and Sibieta, L., (2013) *Public Spending and Pay*, in (eds.) Emmerson, C., Johnson, P., and Miller, H. *The IFS Green Budget: February 2013*