"Public Sector Pay Premium" Fact or Fiction? A report for Unison From Incomes Data Services - February 2013

Introduction

In February 2013 Incomes Data Services (IDS) published a report for UNISON which presented their analysis of the alleged public sector "pay premium" or "pay gap".

The idea of a public sector "premium" has consistently been used by the political right to justify holding down public sector wages, suggesting that this will create greater fairness between workers in the private and public sector. You can see numerous articles in the Daily Mail, (and here), the Daily Telegraph and Daily Express doing just this. Worryingly, these stories often stem from analysis published by independent sources of the IFS and Office of National Statistics. These figures are being used to directly inform the Treasury's public sector pay policy.

However, for some time now there have been major question marks over the methods used to come to the conclusion that public sector workers enjoy a pay premium, even when controlling for factors such as age, gender and qualifications.

UNISON asked IDS to do a systematic investigation of the methods being used and to come to a definitive conclusion on the reliability of the current consensus. Below is a summary of the main findings of the report. The full report can be found here:
http://www.unison.org.uk/file/Public%20Sector%20Pay%20Premium%20final.pdf

Summary of the report

1. Previous research which claims to control for issues such as age, gender, qualifications and other factors are based on one of two sources of data: The Labour Force Survey (LFS) and the Annual Survey of Hours and Earnings (ASHE). Both sources use methods which exaggerate public sector pay and underestimate the private sector. ASHE for example underestimates bonuses, excludes the self-employed (many of whom are highly paid and work in the private sector) and classifies nationalised banks as public sector bodies.

2. The job "comparators" taken from ASHE are very wide and can be easily misused and misrepresented. So when right-wing campaign group Policy Exchange produced a report claiming a premium, it included analysis which compared "sports and leisure assistants" in the private and public sector. In reality they were comparing employees in gyms and leisure centres with people working as professional gamblers and gold caddies.

3. Different methods used to try and calculate the gap between public and private sector pay produce wildly variable results depending on the method used. "Regression Analysis" in particular tends to exaggerate public sector pay. The table below shows how results vary. To say this is not an "exact science" would be an under-statement.

Table 2 Summary of different regression findings since July 2011			
Regression	Date published	Dataset	Difference
Original ONS regression model	July 2011	ASHE	9.1*
Original ONS regression model	March 2012	ASHE	9.0**
Original ONS regression model adjusted for bonuses	Nov 2012	ASHE	7.2
Updated ONS regression model	Nov 2012	ASHE	7.3
Updated ONS regression model including organisation size	Nov 2012	ASHE	2.2
Policy Exchange	November 2011	LFS	8.9
Institute for Fiscal Studies 2012	February 2012	LFS	8.3
Institute for Fiscal Studies 2013	February 2013	LFS	5.2
Swansea University female public/private difference (Actual hours)	June 2012	LFS	6.0
Swansea University female public/private difference (Usual hours)	June 2012	LFS	5.3
Swansea University male public/private difference (Actual hours)	June 2012	LFS	-2.0
Swansea University male public/private difference (Usual hours)	June 2012	LFS	-4.1
David Blanchflower	Dec 2012	LFS	-2.0
*7.8 per cent including LFS adjustment for qualifications **8.2 per cent including LFS adjustment for qualifications			

Source: IDS

What is regression analysis “Regression analysis” attempts to strip away the differences caused by the additional factors and find out precisely what the difference in wages is purely by virtue of someone being in the public sector rather than the private sector. It tries to find out what someone of exactly the same age, with exactly the same skill levels, with exactly the same qualifications and so forth would be paid if they worked in one sector rather than the other.

4. In June of 2012, academics at Swansea University published a robustness check of the IFS’s analysis of public and private sector wage differences. Although the IFS had controlled for age, education, qualifications and region, they had not controlled for a number of other factors which research had shown to affect earnings. These included job tenure, organisation size, occupation, the impact of working part-time and managerial responsibility. What the research from Swansea University found, not unsurprisingly, was that when additional variables known to affect pay were controlled for, the findings changed. For example, rather than the average male public sector wage being 8.9 per cent more than the private sector as the IFS’s variables would suggest, using Swansea’s full specification of variables suggests that for men, the average wage in the private sector is 2.0 per cent higher than the public sector.

5. Recent research from the United States Congressional Budget Office on pay differences between the public and private sector has found that most regressions can significantly overstate the differences between public and private sector workers due to the methodology that they use. Because the wages of public sector employees are substantially less dispersed than similar workers in the private sector the research suggests that it is not

valid to use a statistical method to compare what is known as 'log wages' (the logarithm of public and private sector wages).

Using an alternative regression methodology the CBO found that federal wages were 2 per cent above private sector wages compared to a typical 14 to 19 with "log linear" regressions. This has an important bearing on the reliability of estimates of public private differences in the UK, as all the estimates that have been undertaken are based on a comparison of log linear wages.

6. Variables which are likely to impact on pay, which have been controlled for in analyses in other countries, but have not been factored into to any of the IFS, Policy Exchange and ONS analyses include:

    - Ethnicity: Different ethnic groups are likely to face different barriers to entry into the public and private sector workforce

    - Citizenship: Similarly non-UK citizens will be able to access the public and private sector labour market in different ways (probably across genders too).

    - Size of urban area/travel to work area: In the private sector, rural areas are less likely to attract large employers, which are known to pay more, as there will be an overall shortage of labour. Likewise, employers requiring a pool of highly skilled workers e.g. IT/Technology firms are less likely to locate away from major population centres. In contrast, many public sector roles will be spread more evenly across the population.

7. One factor more than any other though is missing from most attempts to compare public sector wages - the responsibility level of a role. Workers with more responsibility levels are likely to have higher wages than workers with lower levels of responsibility. In fact responsibility is such a key variable, that for benchmarking organisations such as IDS, along with skill level, it is one of the major determinants of appropriate wage levels for a given job.

    Given that there is a higher proportion of public sector workers in professional occupations, and that in the private sector there are higher proportions of elementary occupations and manual operative occupations, any failure to properly factor in responsibility level will have an important impact on the results of any comparison between the two sectors. But the two main public datasets (ASHE and LFS) have only a very limited ability to factor in responsibility level because it is not something that is extensively surveyed by them

8. IDS conclude: "the alternative approach to public and private sector comparisons, the approach which genuinely does compare like with like – pay benchmarking – is rarely mentioned within the context of the debate on public and private sector pay. It does not generate newspaper headlines, and yet it is the most reliable way of comparing pay levels between organisations of similar size and roles of similar responsibility. And consistently, IDS's own extensive benchmarking data and the data from other major benchmarking organisations find that rather than a public sector pay premium, wages in the public sector are below wages in the private sector for comparable roles."