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Public sector pay and pensions

Jonathan Cribb (IFS)

OME Reward in the Public Sector: Research

Seminar Friday 10th July 2015

For more details see:

Cribb, Emmerson and Sibieta (2014) *'Public sector pay in the UK'* (http://www.ifs.org.uk/uploads/publications/comms/r97.pdf)

Cribb and Emmerson (2014) *'Workplace pensions and remuneration in the public and private sectors'* (http://www.ifs.org.uk/uploads/publications/bns/bn151.pdf)

Cribb and Emmerson (2015) *'New public service pensions remain relatively generous despite cuts'* (http://www.ifs.org.uk/publications/7680)

JRF JOSEPH ROWNTREE FOUNDATION

1965 - 2015 50 E·S·R·C 50 YEARS SHAPING SOCIETY

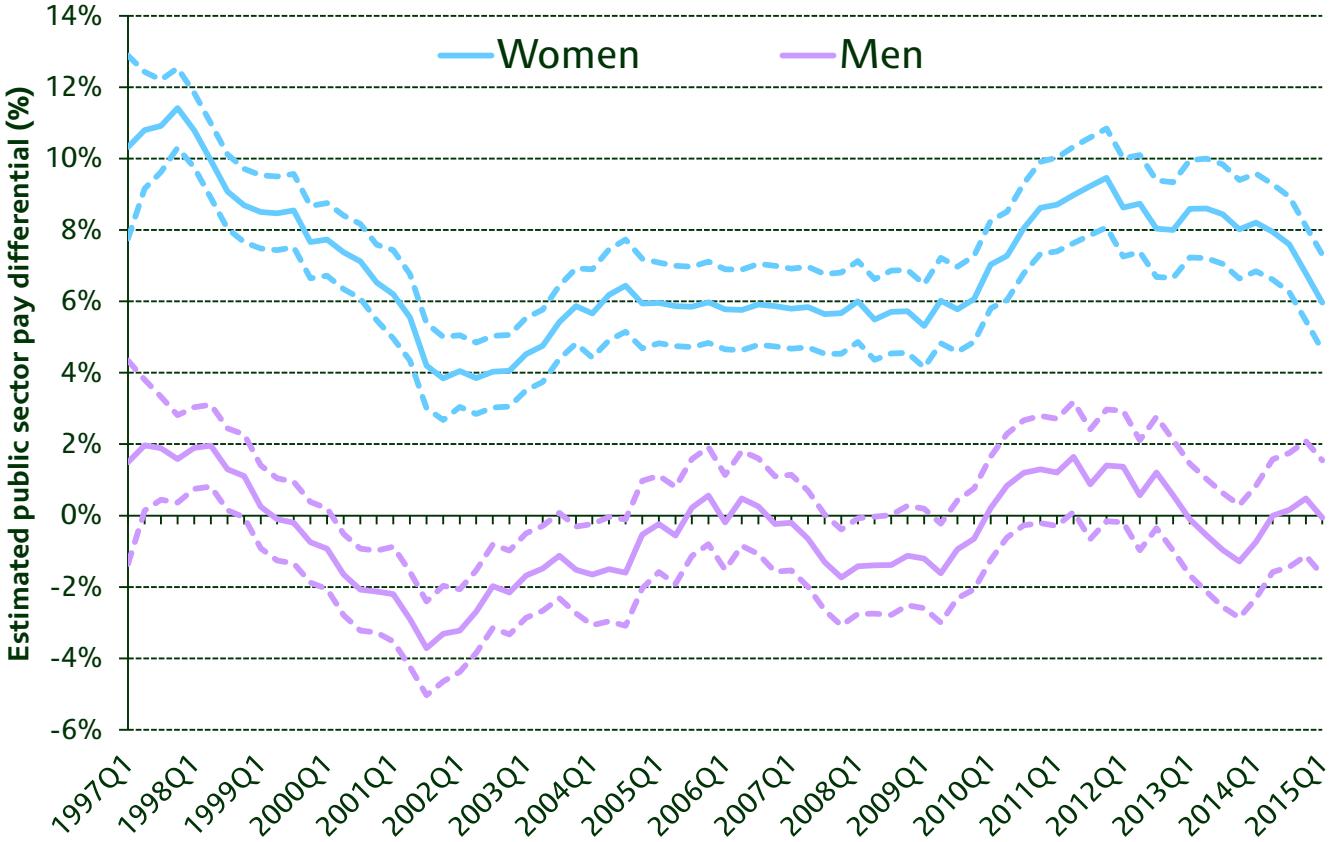
Background

- How has public sector remuneration compared to the private sector since the recession?
  - Coalition government implemented a series of squeezes to public pay
  - Private sector wage growth has also been very weak since 2009
  - 4-year public sector pay squeeze announced at Summer Budget 2015
- Which groups have lower pay differentials relative to private sector?
  - Indicates which groups there may be problems with recruitment/retention
- How does comparison between sectors change when incorporate value of workplace pensions?

Estimating the public sector pay differential

- Estimate the difference in pay between private and public sector workers, controlling for differences in their characteristics
- Using LFS data we run regressions of **log(usual hourly wage)** on:
  - **Public sector**
  - **Age** – quadratic
  - **Education** – detailed qualifications (6 categories)
  - **Experience** – different quadratic profiles by 3 large education groups
  - **Region of work** – 12 government office regions
  - **Sex** – either run separate regressions or interact all variables with sex
  - **Time (in quarters)** – generally pool one year of data or more
- **Percentage differential** calculated from estimated coefficient on public sector (following Halverson and Palmquist, AER 1979)

Public sector hourly pay differential over time



Note: The dashed lines represent 95% confidence intervals. Standards errors are robust to heteroskedasticity. Each data point is based on a four-quarter LFS sample, ending in the labelled quarter.
Source: IFS calculations using LFS data, weighted by LFS income weights.

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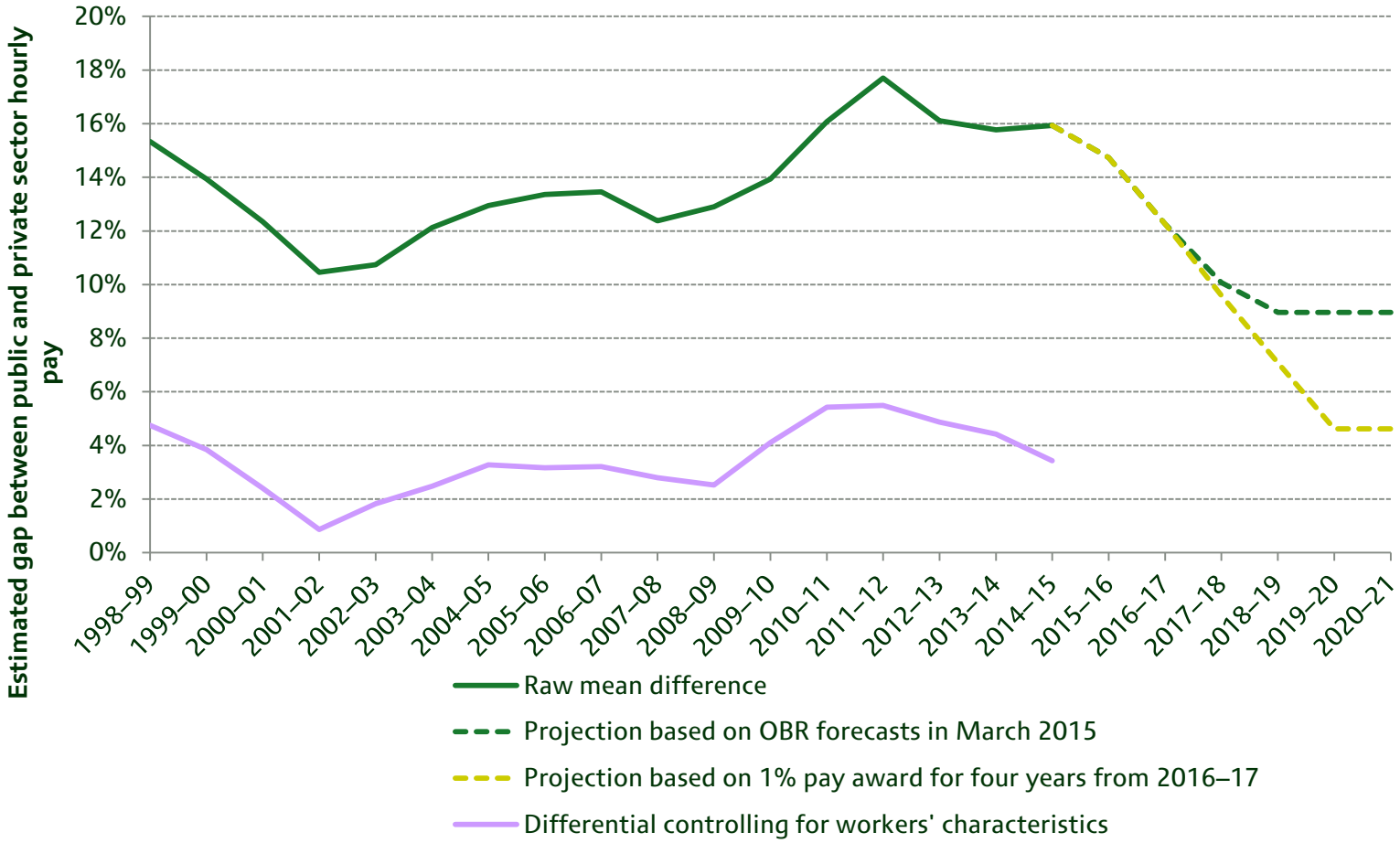
Public pay differential: projections



Notes: Data up to 2014–15 estimated using Labour Force Survey. Differential controlling for workers characteristics controls for differences in age, sex, education, experience and region. Projections are based on OBR forecasts. The second projection adjusts OBR forecasts for the announcement of 1% pay awards from 2016–17 to 2019–20.

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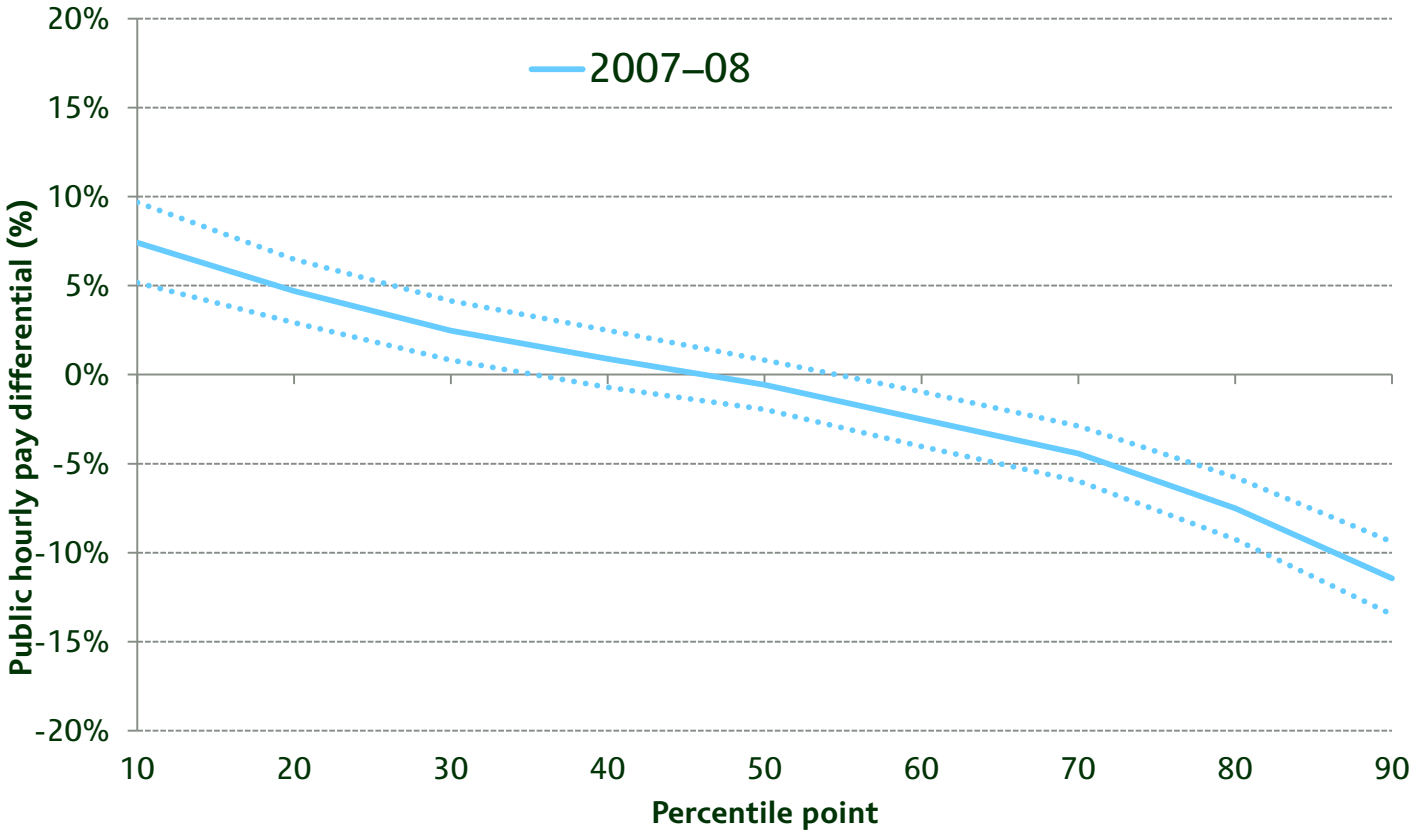
Quantile regression estimates of public pay differential: Men



Notes: Each quantile regression line shows the effect of being in the public sector from quantile regressions (at nine percentile points (10,20,...,90)) of (log) hourly wage on a public sector indicator and a vector of controls (age, education, experience, region)

Source: Figure 3.4 in Cribb, Emmerson and Sibieta (2014).

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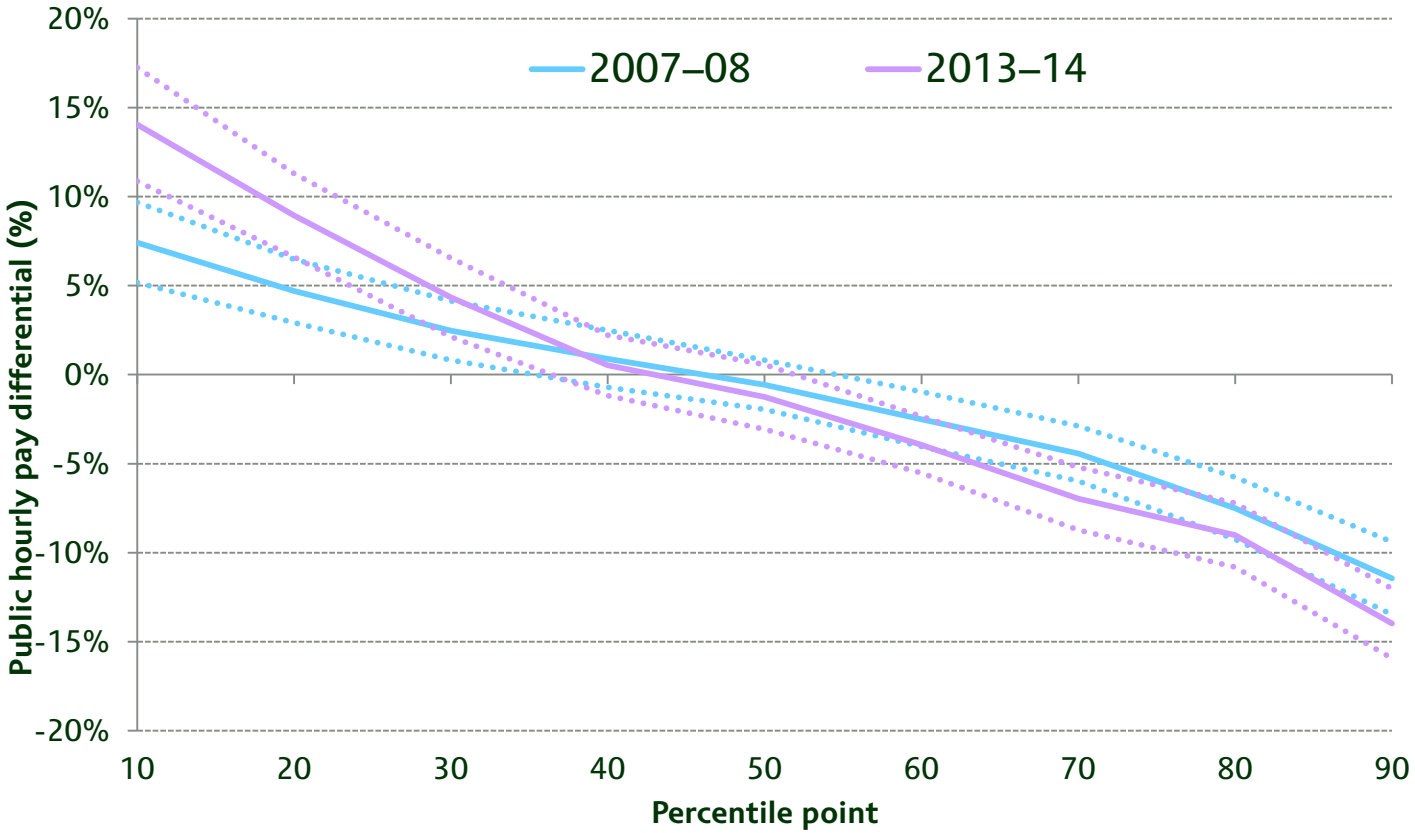

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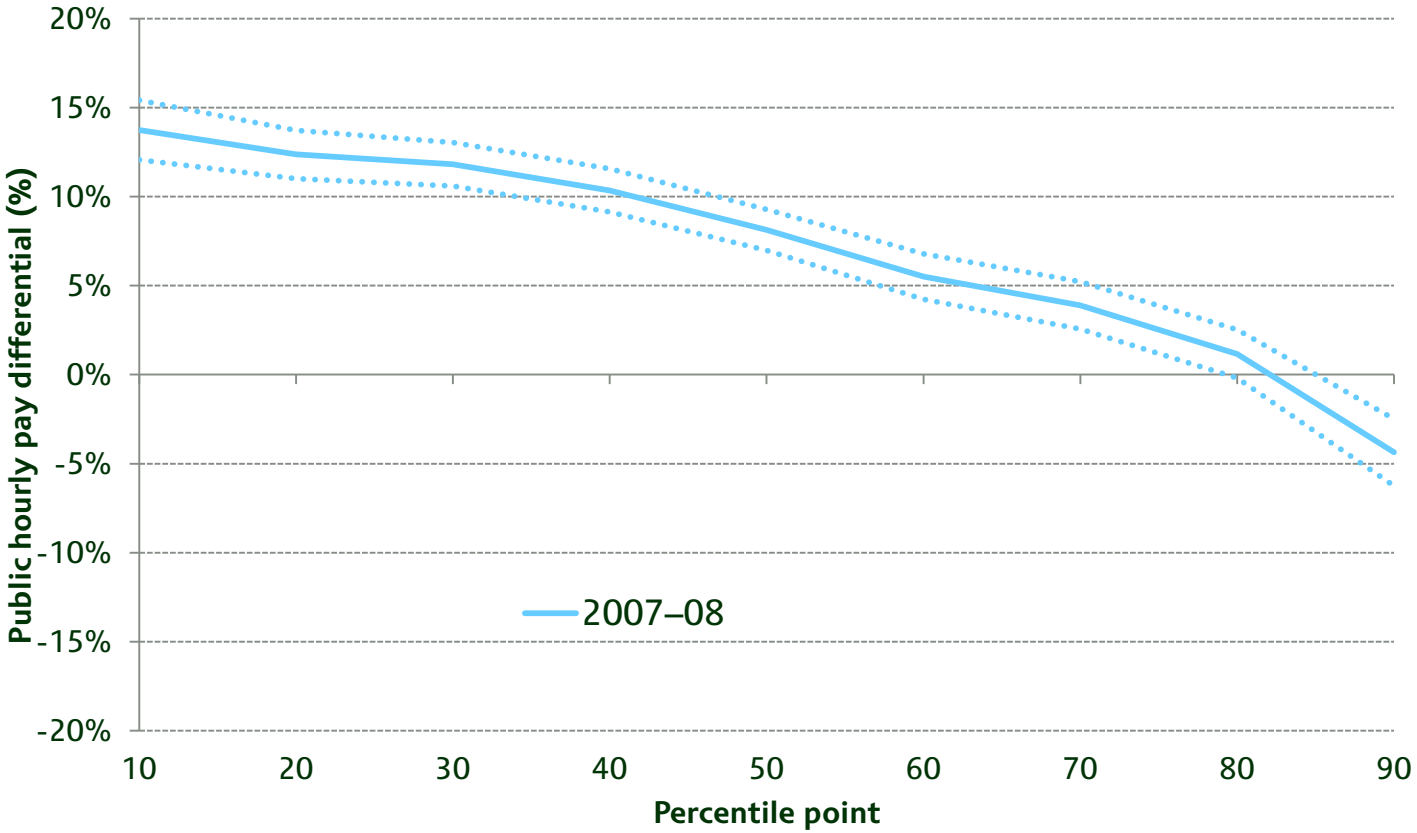
Quantile regression estimates of public pay differential: Women



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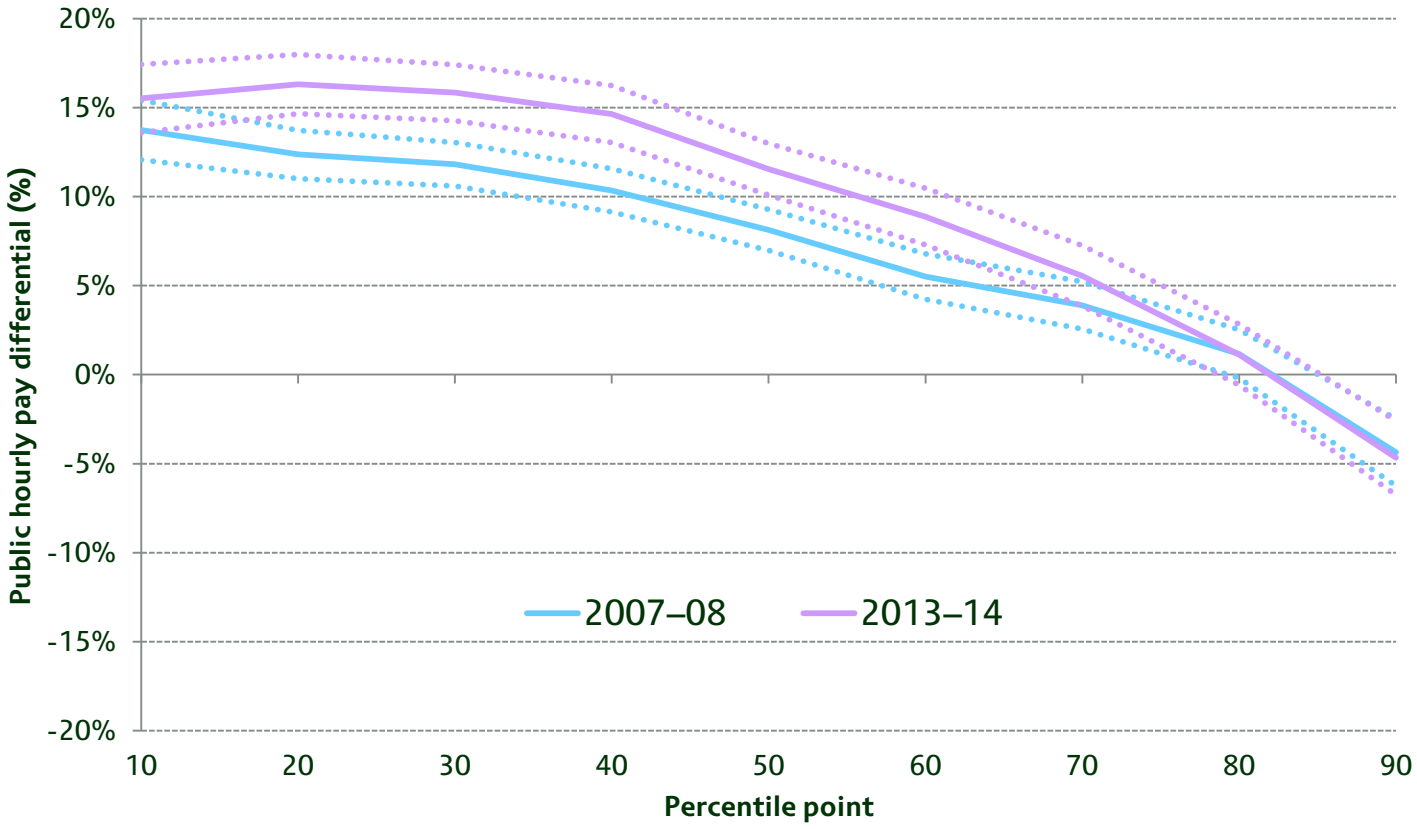

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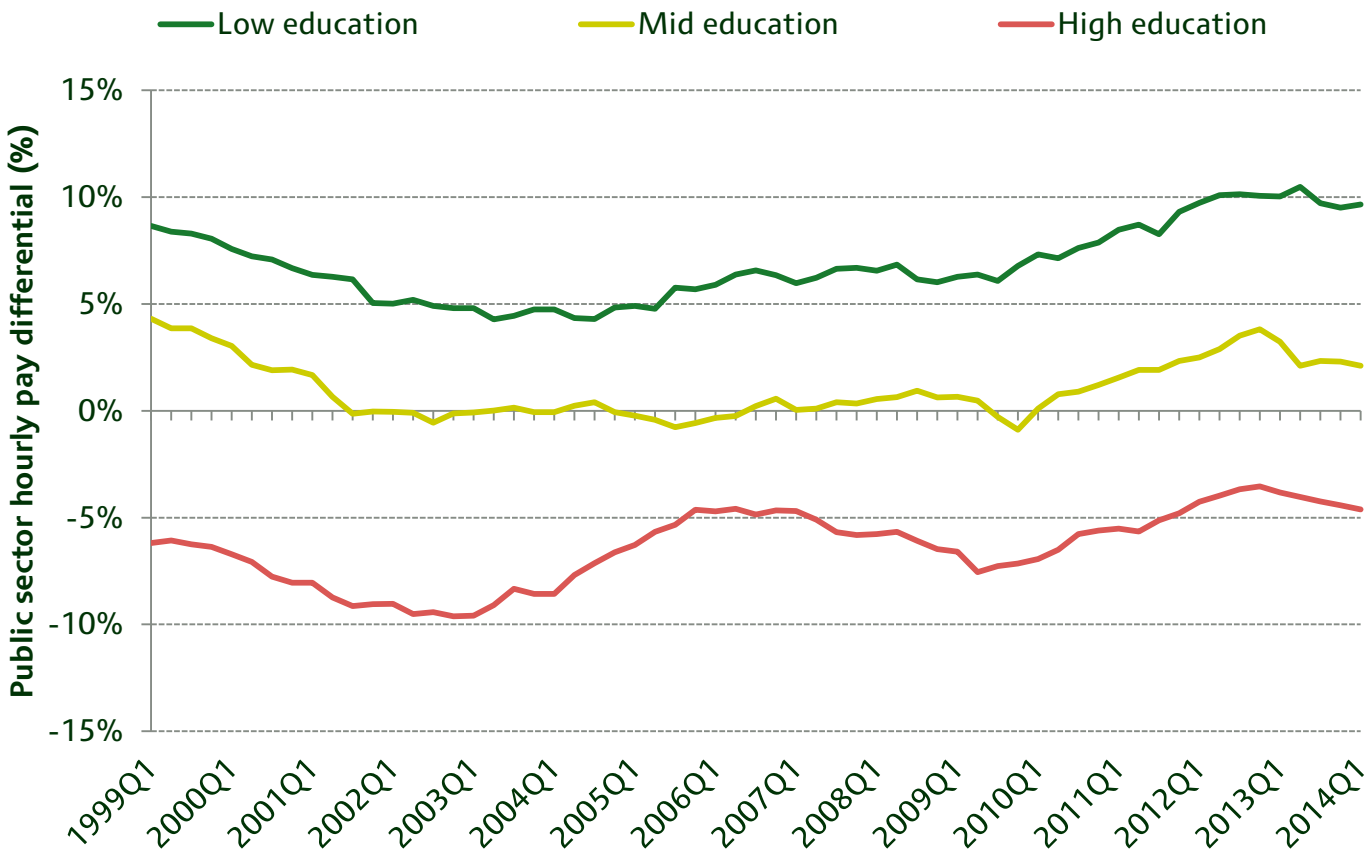
Compression of public sector pay

- Public sector wage distribution is compressed compared to the private sector, even when controlling for workers' characteristics
  - Public pay differential much higher at lower quantiles

- Pay differential at the bottom of the distribution has increased
  - Likely due to protections to low-paid public sectors workers
  - In 2011–12 and 2012–13, pay increases of £250 per year for those earning under £21,000 FTE (and covered by PRBs)
  - Other (tax & benefit) policies could have better helped low earners

- Note that the increase in the minimum wage for those aged 25+ unlikely to have significant impact on public sector employees
  - But will raise wages of lowest paid (mainly private sector) workers

Public pay differential by education group: Men



Notes: Each sample is based on a 12 quarter LFS sample, ending in the labelled year and quarter.
Source: IFS calculation using the LFS, for various years.

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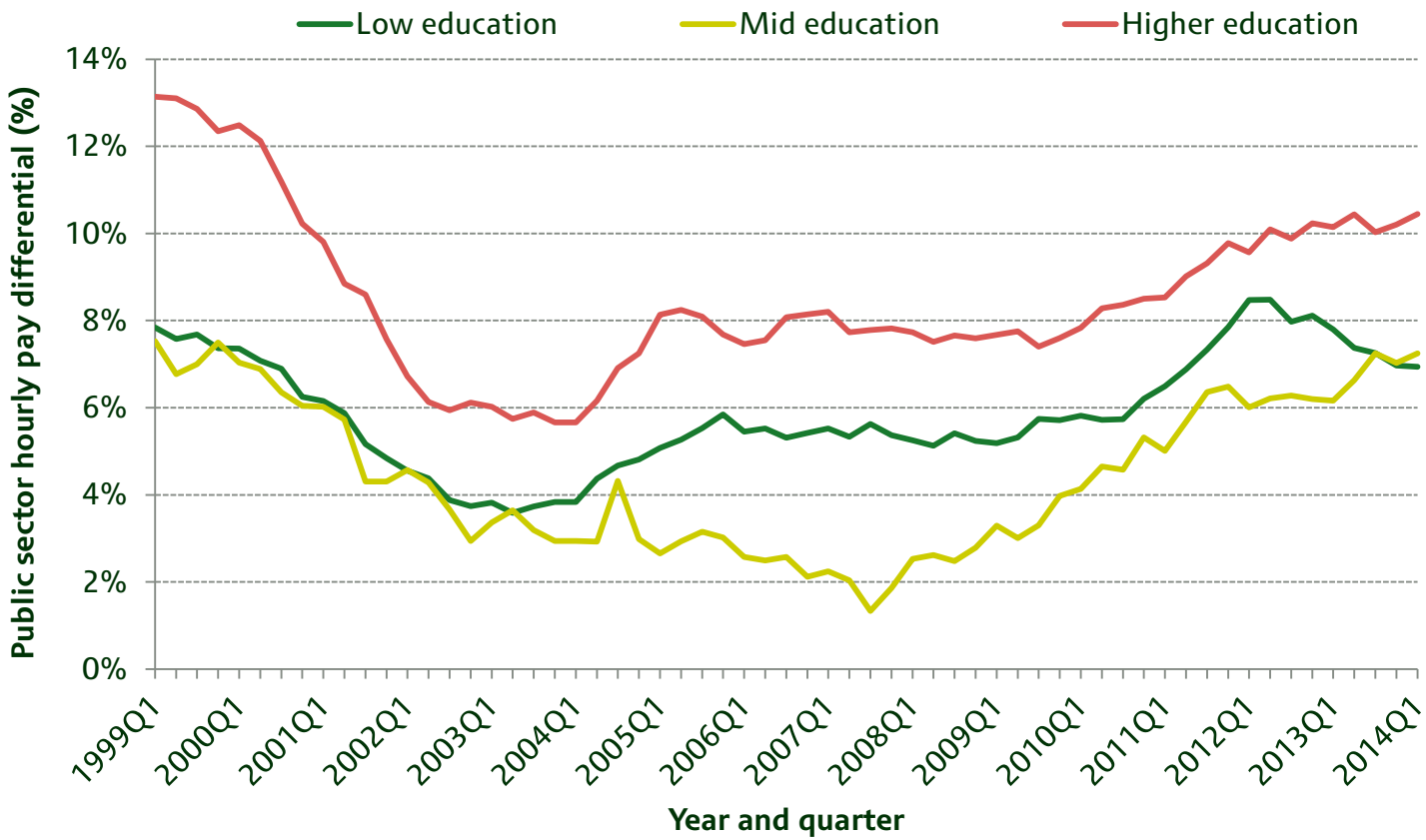
Public pay differential by education group: Women



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Effect of pay differential on quality of workers

- Do high public pay differentials attract higher quality workers to the public sector?
  - Largest differentials for low-educated men and high-educated men
- We use measure of early-age cognitive and non-cognitive abilities from the British Cohort Study (1970)
  - Maths, reading, “ability”, self-esteem, locus of control (at age 10)
  - We compare the abilities of public and private sector workers in 2008 (age 38)
- Low educated men in the public sector have significantly higher **cognitive** skills than those in the private sector
- High educated women in the public sector have significantly higher **non-cognitive** skills than those in the private sector
- Potentially public sector occupations need these higher ability workers
  - But why would the public sector need higher quality low-educated male workers relative to the private sector, but not higher quality low-educated female workers?

Public sector hourly pay differential by region (2011–12 to 2013–14)

Notes: Standard errors are robust to heteroskedasticity and the 95% confidence intervals are indicated by the error bars. Estimated differentials control for education, age, experience and qualifications.
Source: IFS calculations using the LFS, 2011-2014

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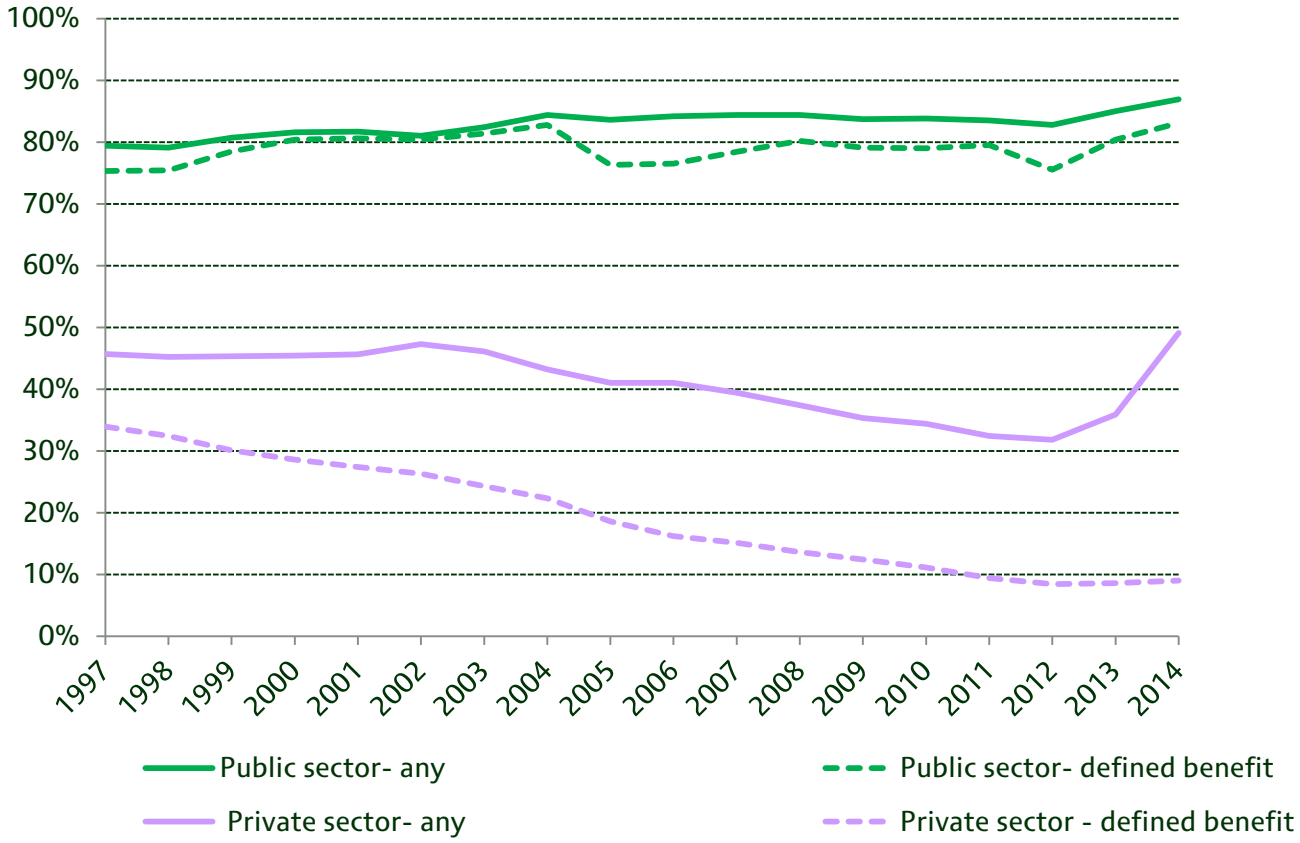
Introducing (greater) local variation in pay?

- Advantages depend on the extent that outside wage options vary across the country
- Making public pay more variable could reduce unintended inequalities in public service provision
- However it would introduce greater complexity into the system
  - Need to change funding systems to allocate higher funds to areas where employing staff is more expensive
- Local determination of wages could lead to upward pressure on wages if trade unions are more organised and experienced at bargaining than local public sector employers
- People doing same job paid different amounts?
  - This already happens (e.g. London)
  - Trade off this against potential to improve efficiency in delivery of services and/or greater equity in quality of services across the UK

Pension provision differs greatly between sectors

Membership of employer-provided pensions by sector, 1997 to 2014



Source: Annual Survey of Hours and Earnings Pension Tables, 1997 to 2014

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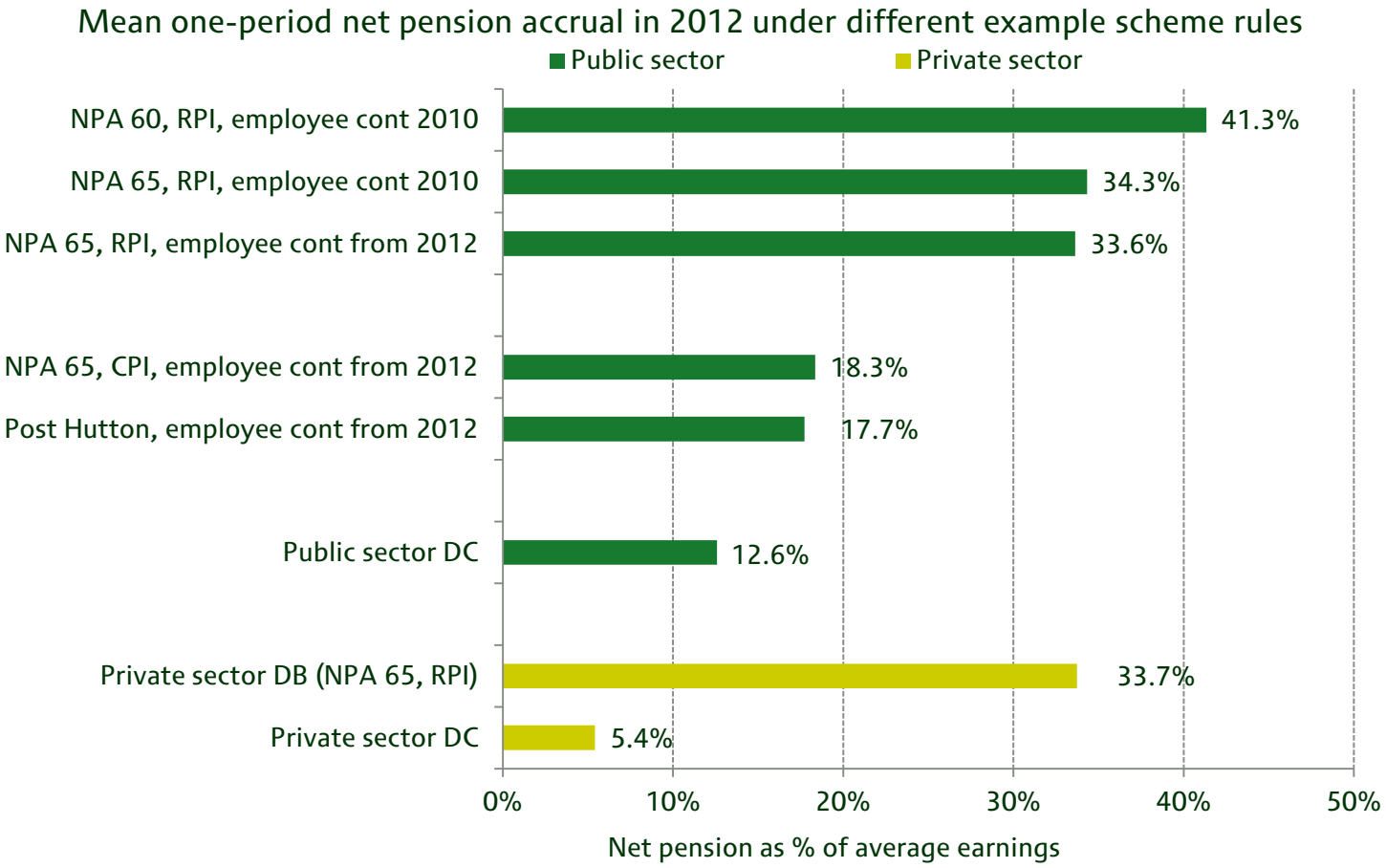
Valuing employers' pension contributions

- There are multiple ways to value employers' pension contributions
- We estimate "one-period net pension accrual"
  - Essentially the change in the pension pot from now to a year's time, minus the amount contributed by the employee
- Use example scheme rules and combine data from the LFS, ASHE and BHPS to estimate value of workplace pensions for all workers, 1997 to 2012
  - Incorporates changing pension coverage (DB/DC), life expectancy, annuity rates, public service pension reforms
- We then estimate differential between public and private remuneration, including value of workplace pensions
- More details on methodology and assumptions found in Cribb and Emmerson (2014)

Public service pension reforms reduce value of pensions



Source: Fig 2 of *Cribb and Emmerson (2014)* "Workplace pensions and remuneration in the public and private sectors in the UK"

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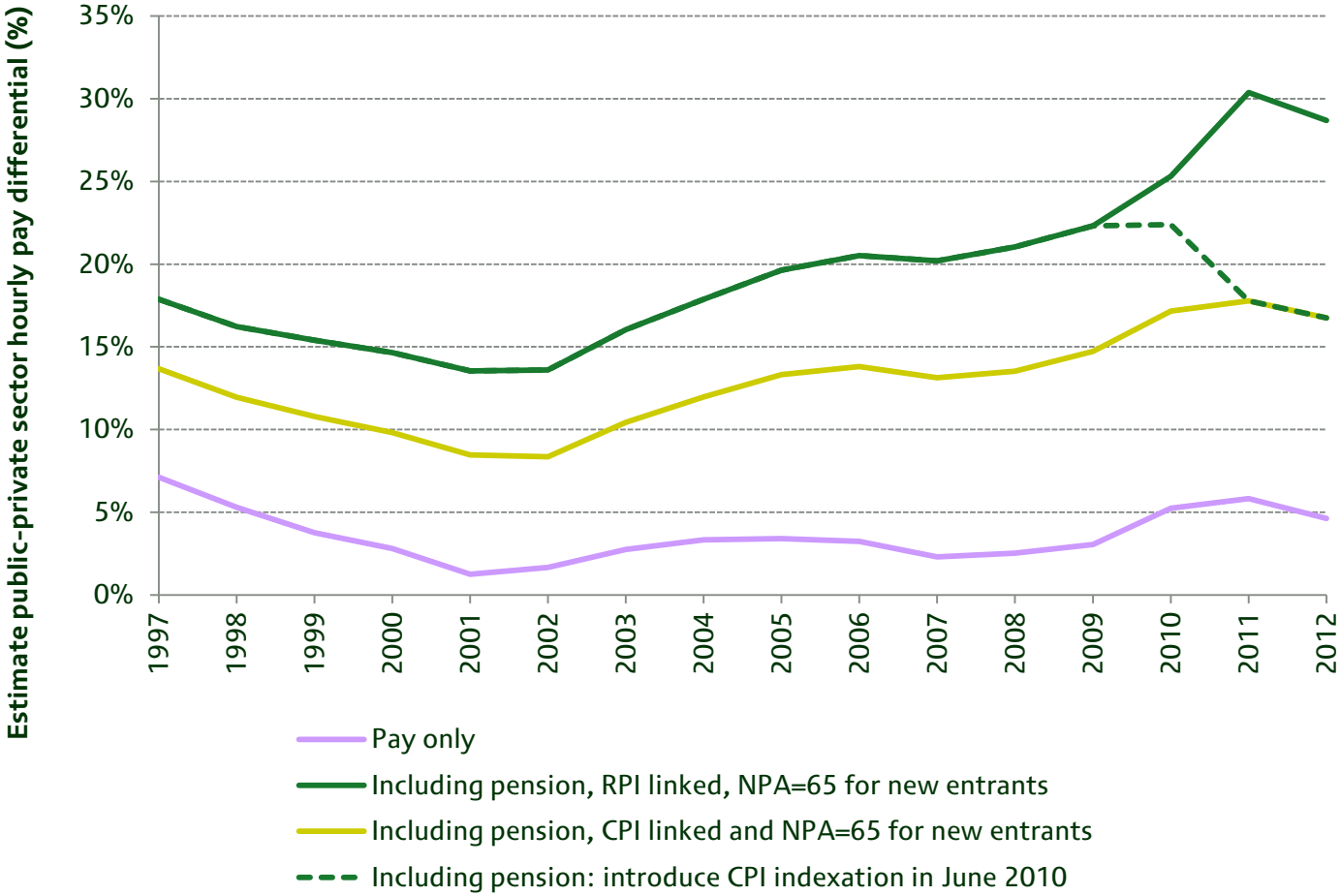
Public sector pay differential including pensions



Source: Fig 2 of Cribb and Emmerson (2014) "Workplace pensions and remuneration in the public and private sectors in the UK"

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Change in the pay differential including pensions

- Between 2002 and 2009, pay differential including pensions rose from 14% to 22% (much more than rise excluding pensions)
  - Falling pension coverage in the private sector (particularly DB)
  - Rising value of public sector DB pensions (e.g. rising life expectancy)
- CPI indexation of public sector pensions significantly reduced pay differential
  - Also prevented differential increasing (as RPI increased relative to CPI)
- Most variation in the pay differential driven by pensions rather than headline pay
- Hutton reforms have different effects on different people
  - Large cut on average for those who still have NPA of 60
  - Generally a move to the "Career Average" schemes leaves low educated better off, high educated worse off
  - Those within 10 years of NPA: unaffected

Conclusion

- Public pay differential almost returned to its pre-crisis level
  - 4-year pay squeeze take public pay levels well below long term average relative to private sector
  - Questions over how difficult it will be able to recruit and retain high quality workers
- Lowest (negative) public pay differentials for those in London and South East, high educated men, top part of earnings distribution
- Public service pensions remain much more valuable than those in the private sector, despite coalition reforms
  - Hutton reforms reduce future accruals for high-flyers
  - Increases in employee contributions also larger for higher paid
  - Low educated tend to benefit from the new schemes
  - Auto enrolment boosting pension coverage in the private sector, although very low levels of employer contributions at the moment