A black and white photograph of four police officers in uniform and helmets, standing in a line. The officers are wearing dark uniforms with light-colored shirts and ties. They are wearing dark helmets with a light-colored star-shaped badge on the front. The background is a light-colored wall with a grid of rectangular panels.

32nd Annual Cumberland Lodge Police
Conference: The Legitimacy of
Policing, 19-21 April 2013

The Economics behind Winsor

(and, if time, what effect do pay reforms have on policing?)

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Background

- I was adviser to the Winsor Review on the labour market aspects of the police reform.
- This advice involved two aspects:
 - An **evidence base** (especially for Part 1)
 - An underpinning for **pay reforms** (especially for Part 2)
- A prior evidence base on the economics of policing and the labour market for police was (sadly) lacking. *(Why? – perhaps arising from form of pay negotiations relative to Review Bodies?)*
- I shall talk about these economic aspects of the police labour market & the rationale for (some) reforms.
- **Impact?** – too early to say but if time permits, something brief on possible impact of pay reforms.

The evidence base

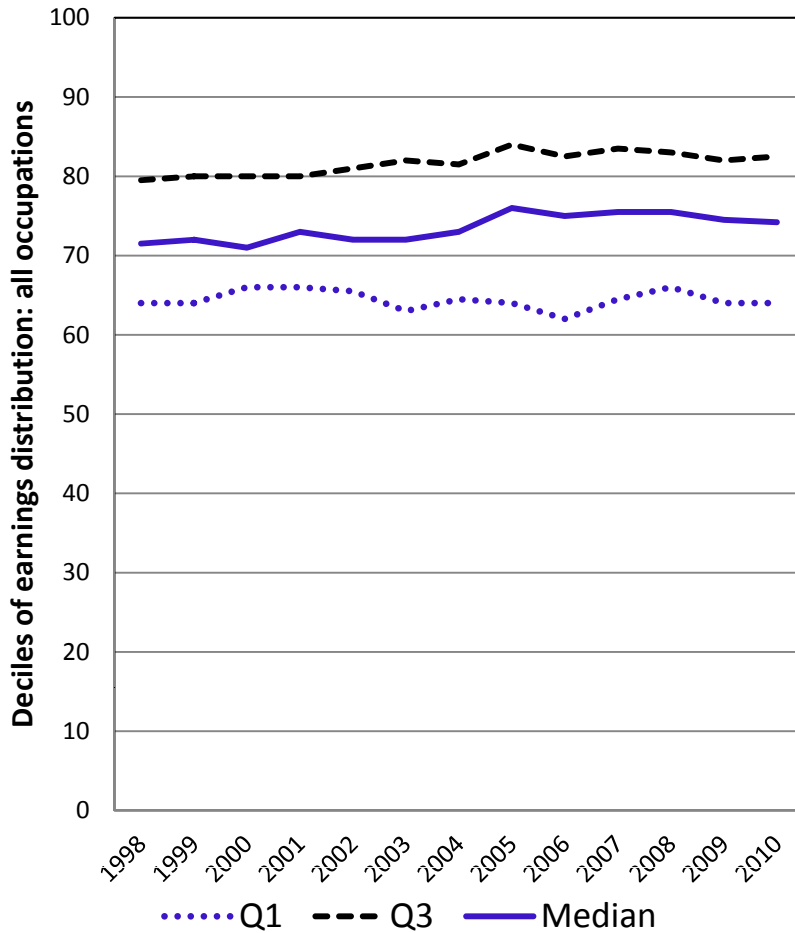
- The questions I was asked:
 - Where are police in the pay distribution?
 - Where are police relative to other public sector workers, especially the emergency services?
 - Is there a gender gap?
 - Has police pay grown faster/slower than comparators in recent years?
 - What is the regional variation in police pay, relative to other workers (average earnings)?
 - How do UK police earnings compare to police earnings abroad (where police structures are similar)?
 - Police officers' earnings relative to police staff?
 - Pension arrangements relative to other public sector workers?

The evidence base

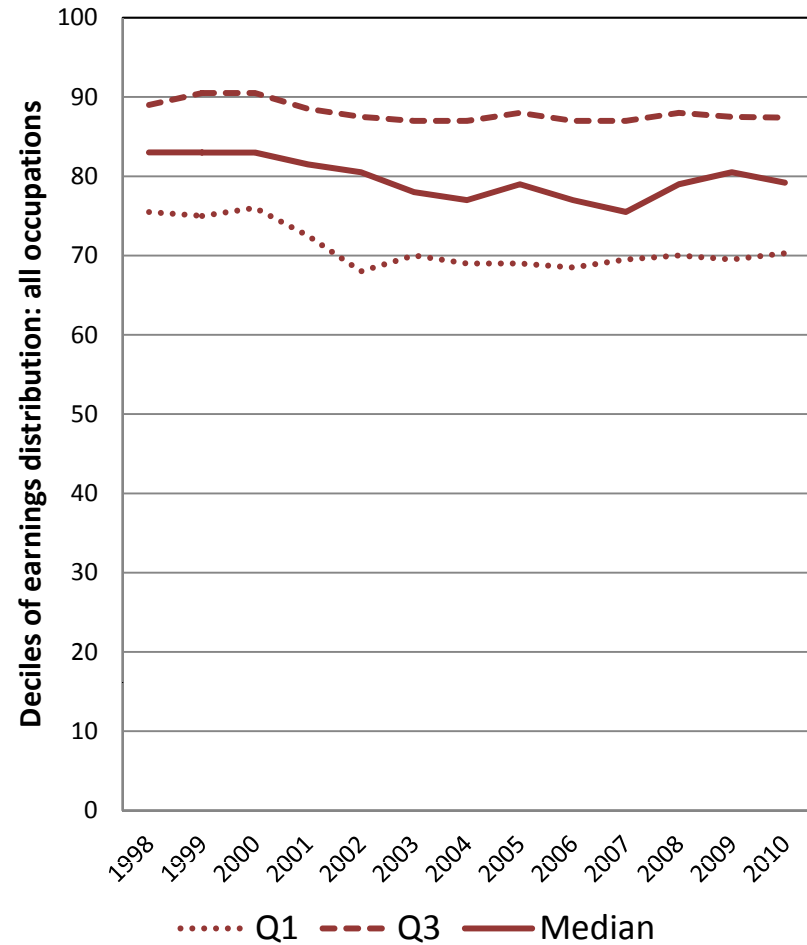
- Is there a gender gap?
 - Yes, but lower than many other occupations. Base pay not a big issue but overtime, promotions?
- Has police pay grown faster/slower than comparators in recent years?
 - Last 3-year settlement was more generous than most (except military) but over longer run, no real difference between growth of police pay and RB-covered groups.
- Police officers' earnings relative to police staff?
 - Higher, and often in practice doing similar jobs!
- Pension arrangements relative to other public sector workers?
 - More generous (i.e. no evidence of differential mortality).

Where are police in the pay distribution?

Pay of FT policemen (sergeants and below) in relation to overall FT earnings distribution for men

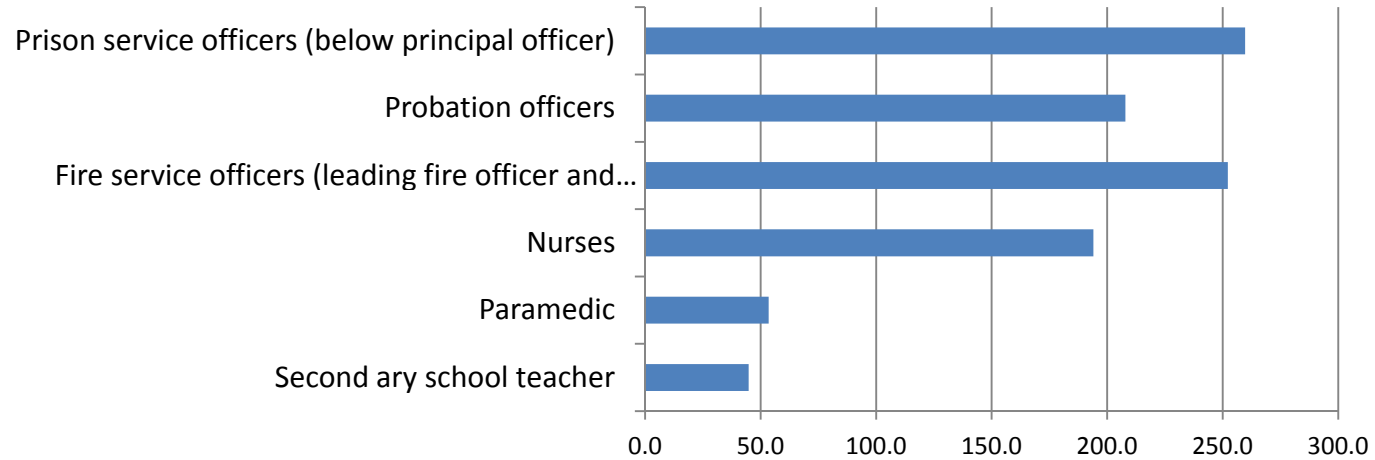


Pay of FT policewomen (sergeant and below) in relation to overall FT earnings distribution for women

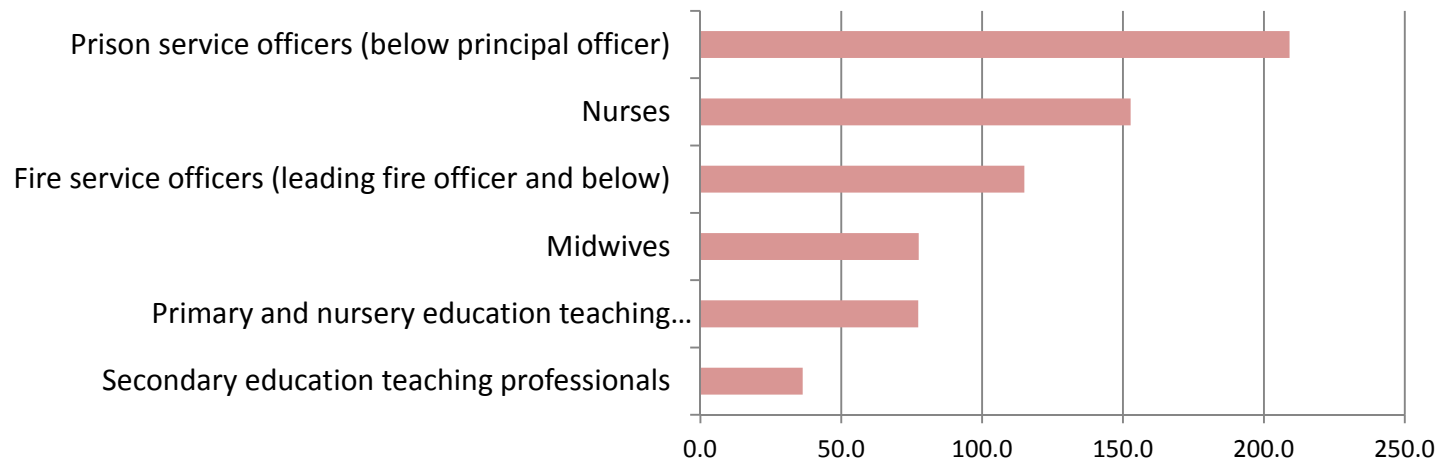


Where are police relative to other public sector workers, especially the emergency services?

Excess of mean police pay: men (£ weekly)

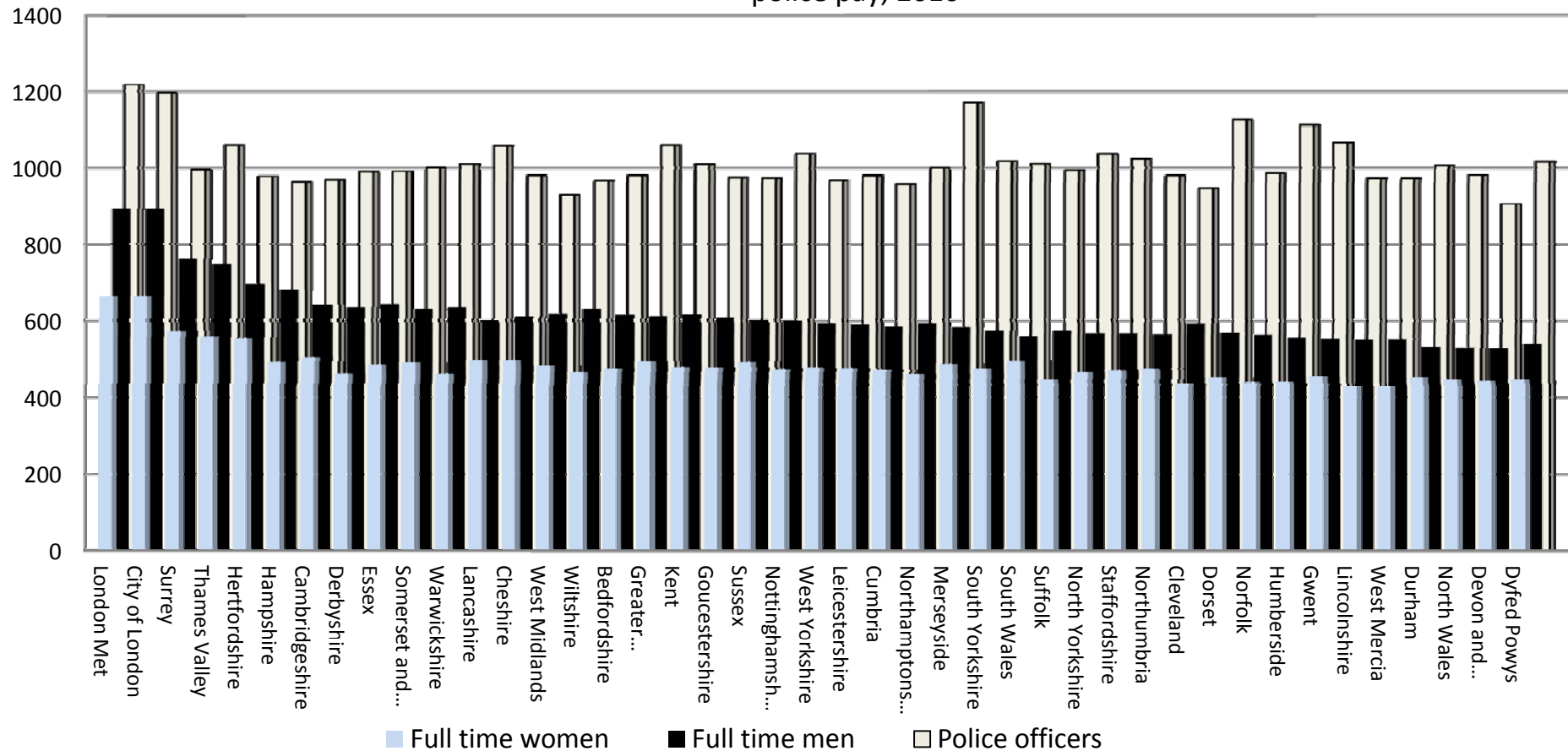


Excess of mean police pay: women (£ weekly)



What is the regional variation in police pay, relative to other workers (average earnings)?

Average weekly earnings (£) by police authority area of work relative to average police pay, 2010



Sources: Full time males and females: Annual Survey of Hours and Earnings; constructed by mapping Table 7a (earnings by local authority of work) to police authority areas.

Police officers: CIPFA police actuals: average police pay = total pay bill divided by number of officer

How do UK police earnings compare to police earnings abroad (where police structures are similar)?

- **United Kingdom**
Police pay roughly 30-50% above average pay (men); 75 to 100% above average (women)
- **United States**
Pay set locally: \$100,000 in Orange County, California; \$30,000 in some southern States: from 25% to 100% greater than (local) average pay.
- **Canada**
Large range: higher in big cities and far North; from 8% to 72% above average pay.
- **Australia/New Zealand**
Pay data are poor but looks broadly similar to UK. (No overtime in NZ?)
- **Denmark, Germany and Sweden**
Pay data are good. Pay of police is roughly equal to average earnings i.e. pay 'premium' = 0%. Slightly higher in Denmark, lower in Germany.

Underpinning the pay reforms

- The questions I was asked:
 - What is the appropriate level of pay for police officers?
 - If there was a ‘pay premium’ or ‘X-factor’, as in the armed forces, what should it be? (*e.g. in relation to restricted duties*)
 - Is there a role for incremental pay structures in the police?
 - If we had local pay variation for police officers, what would the pay structure look like?
 - Should the pensionable age be higher?

What is the appropriate level of pay for police officers?

- In Winsor Final Report (Appendix 3), I suggest two criteria:
 - A ‘market’ test:
 - Can we recruit and retain police officers of sufficient quality? *(this is the test applied by Pay Review Bodies)*
 - *How do we assess quality? – Answer in part: we have a National Assessment process for recruits.*
 - An ‘intrinsic value of the job’ test:
 - Policing is a potentially multifaceted occupation requiring complex skills (but few explicit qualifications).
 - *Can we find other jobs/tasks with similar skill mixes – what does the market ‘pay’ for them?*
 - Parallel with ‘X-factor’ in armed forces e.g. full ‘deployability’.

A market test I

- **Retention** is not an issue (in general) though there may be local issues, see Winsor review. Pension especially 1987 PPS has strong retention incentives.
- So focus on **Recruitment**.
 - Some general observations, then a specific test.
 - There is no shortage of applicants to police forces.
 - Process of recruiting and selected candidates for national assessment is inconsistent and haphazard in some forces. The quality of data on recruitment sent to Home Office (ADR611) is, in the case of some police forces, appalling.
 - The relative success rate of applicants with different characteristics (e.g. education, gender, experience) at national assessment differs widely but seems to have little impact in some forces on selection of candidates for national assessment.

A market test II

- The National Assessment is the benchmark for selecting candidates with sufficient aptitude to be police officers.
- If there were a shortage of suitable recruits, it would show up at this stage (e.g high failure rates). But it does not.
- Statistical analysis – both by then-NPIA and myself show that certain characteristics are associated with higher success probability – having ‘A’ levels, female, previous experience.
- More police recruits could be found by better targeting of applicants with these characteristics.
- A more sophisticated test – do areas with high ‘outside wages’ e.g South East England attract lower quality recruits (i.e. lower pass rates). Statistical analysis shows answer is ‘no’ – national pay rates are high enough to recruit even in highest-paying areas.

The intrinsic value of the job of police officer

- All professions argue that they require specialist and unique skills which 'justify' a premium.
- What is the argument in case of police? *(I asked ACPO!)*
- Look for occupations that require similar specific characteristics (*Deployability? High stress? Flexible response? Diverse settings? Specific restrictions e.g cannot join TU? Risk? Some of these may be positive not negative attributes*).
- Do such occupations pay a 'pay premium' over average earnings (given qualifications). Is the police 'premium' therefore too low or too high? (*Noting that police already have a pay premium over and above other emergency services*)

Judging the 'pay premium' or 'X-factor'

- Winsor (Final Report, p.445) argue that 'pay premium' (or 'X-factor') attached to pay of police officer over comparable occupations should be 8%.
- This is a judgement call (for military pay it is 14%), in part based on the following analysis:
- I examined: *(i) what specific characteristics of policing might warrant a 'premium'; (ii) whether the labour market rewards such characteristics in the labour market with a premium – and if, how much?*
- These factors are:
 - **Mortality risk at work** – only motor-related accidents stand out as above-average risk for police relative to other occupations
 - **Life expectancy on retirement** - police have same mortality characteristics as school teachers
 - **Stress at work** - assuming work *is* more stressful than other jobs, then academic studies suggests stressful jobs in the labour market pay around 8% more
 - **Full deployability** – is *not* generally rewarded in the labour market, other than by shift premia etc which police already receive.

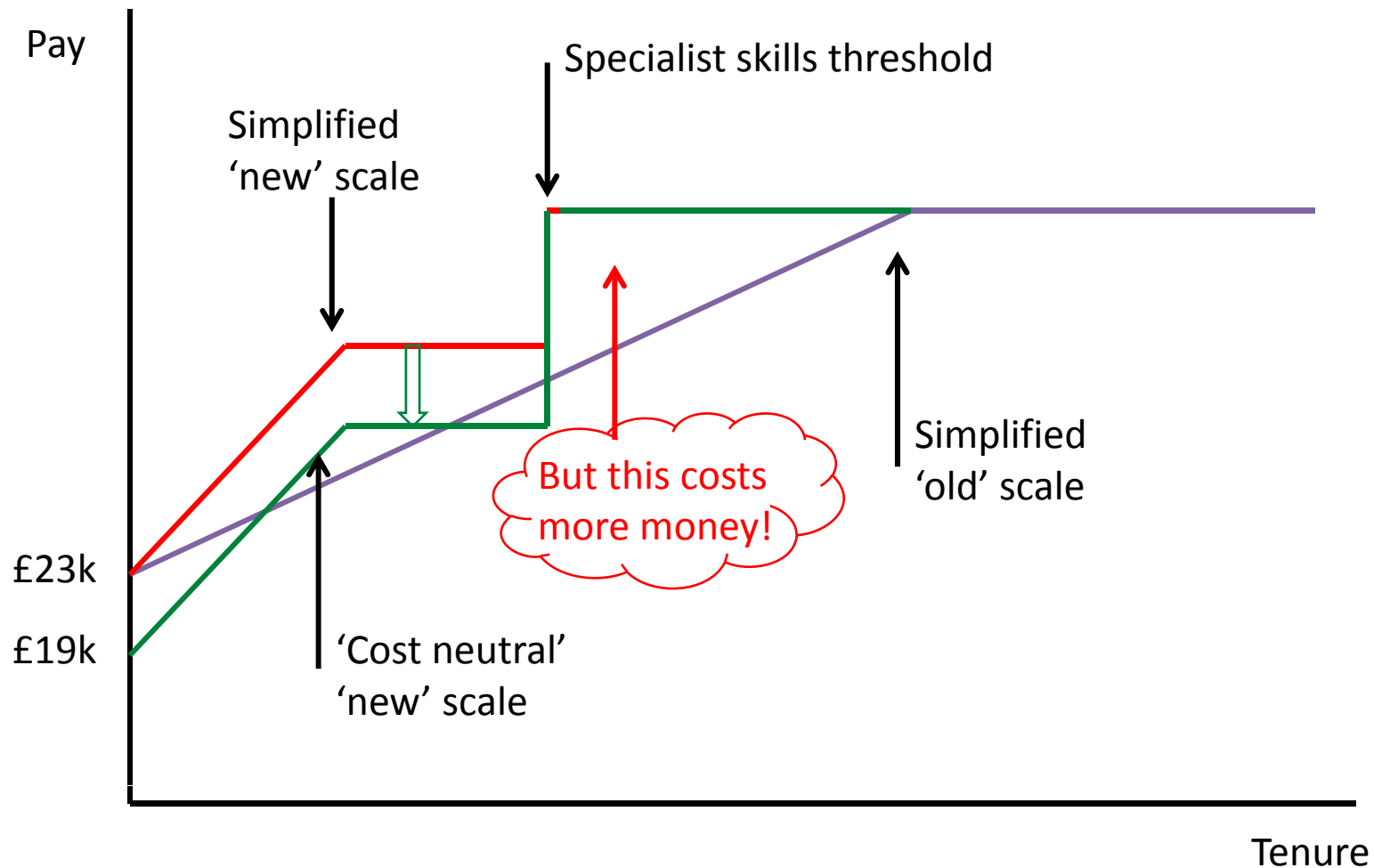
Summing-up on pay levels

- There is not a retention or recruitment problem at current pay levels.
- Indeed better targeting could probably raise the number of suitable recruits.
- To monitor any emergence of recruitment/retention problems on new scales we would look most clearly at those forces where outside earnings were closer to police pay and also proximity to London Met (e.g Surrey, Thames Valley, Herts).
- There is a case for a 'pay premium' for police officers over and above pay for comparatively qualified personnel in other occupations.
- But this case does not warrant the significant pay premium under old scales over other occupations and especially emergency services.
- (Note: pay freeze/1% is *not* Winsor but current policy towards public sector – other public sector workers have seen real reductions in remuneration of 15-20%!)

The role of incremental pay structures

- An incremental pay structure, like a pension, **backloads** lifetime pay. E.g. constable scale pre-Winsor had 10 points.
- Why an incremental structure not a 'spot' rate?
 - Makes it easier to retain workforce. *But the police pension already does that, and there's no evidence of a retention problem.*
 - Where 'effort' (performance) cannot easily be monitored. Gives an incentive to workforce not to 'shirk'. *But police should be motivated by job, moreover their performance can be (and should be) individually monitored.*
 - **Therefore there is at best a weak case for incremental pay that is unrelated to performance for police officers. Early career incremental scales that are linked to skill acquisition/competency thresholds are more justifiable than long incremental scales.**

Winsor pay scales are shorter, accelerate faster, but this comes at a cost



Other remuneration issues

- These are extensively discussed in Winsor reports but I summarise here.
- **Local Pay**
 - Average pay ‘premium’ is high but varies locally given variation in outside earnings
 - Risk that real reductions in overall police pay hits quality in some forces (see earlier slides).
 - Pay differentiation by force? Local bargaining or national structure with pay differentiated by zone (as in e.g. NHS AfC pay structure)?
 - Extensively discussed in report; a proposal mapped out; no recommendation made except against local bargaining.
- **Pensions**
 - Another big issue I can discuss! Winsor only asked to make recommendations concerning pension age as other changes negotiated.

Conclusions

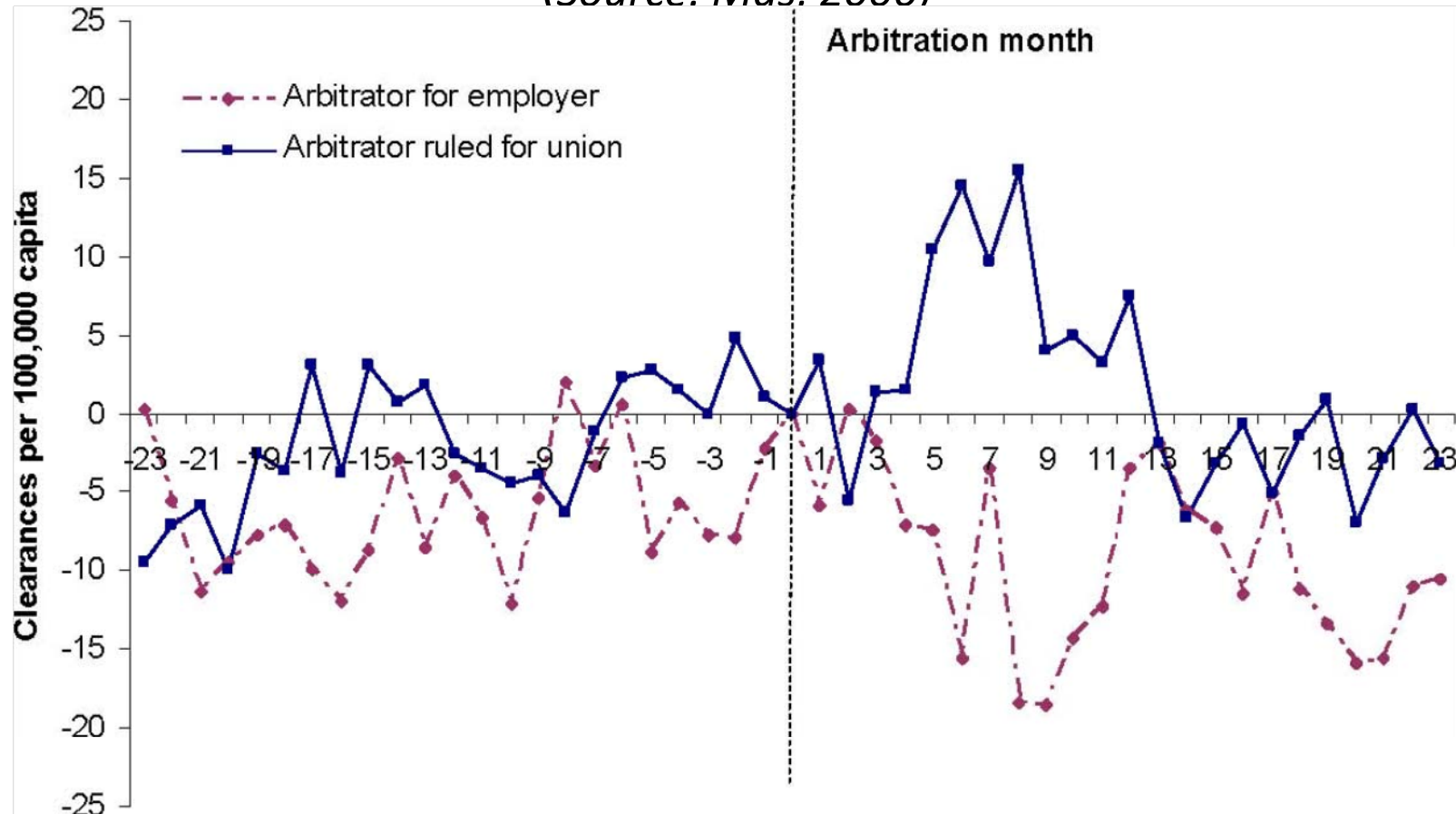
- Winsor Review makes tough choices but insisted reforms should be evidence-based.
- I have tried to give some indication today of how evidence was assembled and utilised to underpin recommendations.
- **Comment:** it is much tougher (politically, and on workforce) to introduce pay reforms when public funds are tight than when they are not e.g. compare mid-2000s with early 2010s.
- **Case study:** introduction of NHS AfC in 2004 – there were significant losers but they could be partially compensated by real spending increases. In same period, police pay ‘reforms’ were one-sided (e.g. Introduction of CRTP, SSP).

Is there serious evidence on how pay outcomes affect police performance?

- Studies that find that morale is adversely affected by real pay reductions are hardly ‘rocket science’!!
- We need a scientific study of whether the quality of policing is adversely affected by real pay reductions (and improved by real pay increases).
- Only one study (to my knowledge): tackles this seriously (and even then we can argue about the inferences that the study draws).
- Mas (2006) ‘Pay, reference points and public performance’, *Quarterly Journal of Economics* examines police performance in context of local arbitration awards across New Jersey police forces (settlements are broadly decided by ‘pendulum arbitration’).

Regression-adjusted event study estimates of the effect of arbitration rulings on per capita clear-up rates

(Source: Mas, 2006)



Regression-adjusted estimates based on a regression of clearances per 100,000 capita on event-time dummies interacted with indicators for whether the arbitrator ruled in favor of the union or against the union. Estimates on the interacted event-time dummies are plotted relative to the omitted month of arbitration for Union and Employer cities. Regression model includes controls for year \times month of arbitration dummies, arbitration window fixed-effects, and city fixed-effects for the group of cities that never underwent arbitration. Author's calculation based on NJ PERC arbitration cases matched to monthly municipal clearance rates at the jurisdiction level from FBI Uniform Crime Reports. Sample is weighted by population in the jurisdiction in 1976. Data span the years 1976 through 1996 for arbitration cases occurring between 1978 and 1996.