The unadjusted gender pay gap in earnings in Northern Ireland and the Republic of Ireland

ESRI ECONOMIC & SOCIAL RESEARCH INSTITUTE

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Speaker
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Comments

Main Findings I

- What we have is a very rigorous analysis of the data that provides us with an important comparative insight into the relative size of the gender pay gap in the Republic and Northern Ireland.
- Its not clear where the overall gap is highest. Taking mean hourly pay, the gap in RoI was 9% and 4.1% in NI. Taking median hourly pay, the gap in RoI was 2.8% and 8.1% in NI.
- In NI the gap is constant across most of the earnings distribution but at the lowest and highest wage deciles females earn more than men (figure 3).
- In RoI females incur a very substantial hourly pay penalty of around 50% in the top wage decile.

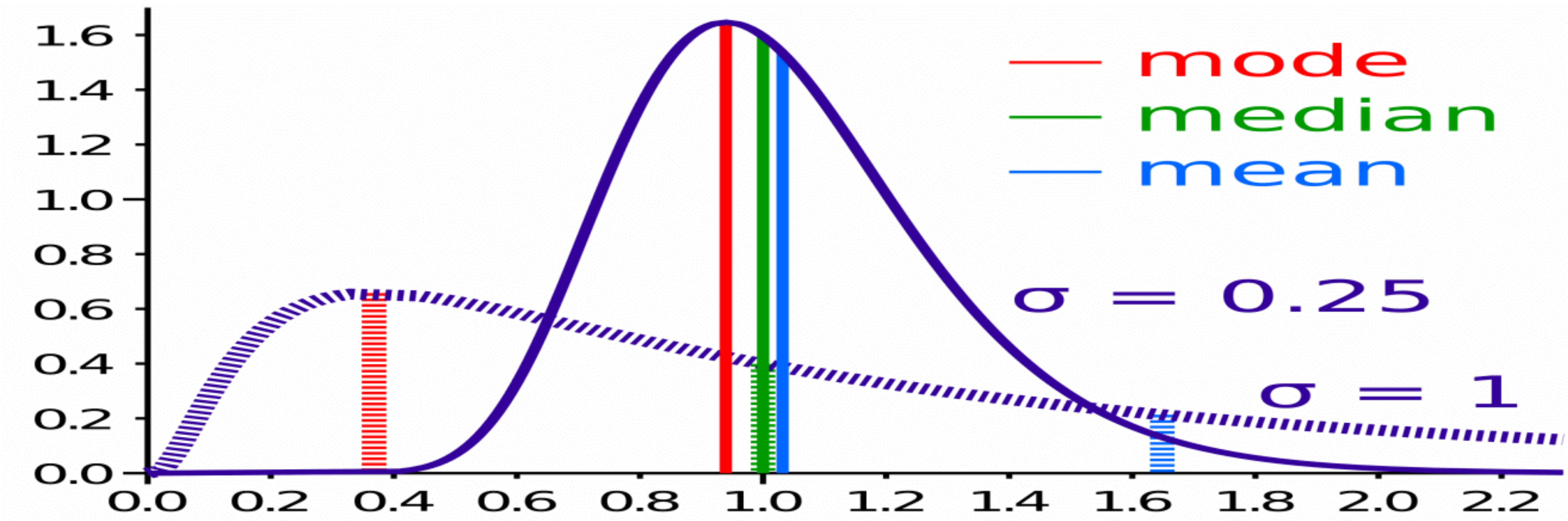
Main Findings II

- There are substantial variations in the estimated gap by household and job characteristics in both jurisdictions. Again these estimates vary depending on the mean or the median, with the estimated gap going in opposite directions in many instances.
- Its hugely important that these issues are discussed and examined as it is typically the unadjusted gap, rather than the adjusted gap which is much heavily preferred by economists, that is reported and discussed in the media.
- The adjusted gap measures the proportion of earnings that is left unexplained after differences in observable characteristics, such as education, experience and tenure, are fully controlled for.

Some comments I

- The gap between the estimates based on median and mean earnings is very noticeable, particularly for NI, and both measures generate very different results in some instances.
- Typically, we see greater gaps between the mean and median in more skewed earnings distributions and it seems NI is more heavily skewed to the left than RoI.
- It may also be the case that the gender wage distributions between regions are skewed differently.
- The more skewed the distribution the less reasonable the mean appears as a measure of central tendency. Perhaps this suggests that, given the typically skewed nature of earnings distributions, the median is a more stable statistic for descriptive comparative analysis of the unadjusted gap?

Mean vs Mode



1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2
mode
median
mean
σ = 0.25
σ = 1

Some comments II

- In many ways you are estimating a partially adjusted gap i.e. when you analyse the raw differential within wage determining categories (education, occupation etc) you are effectively partially adjusting for factors that help explain some of the pay gap.
- Its important to note that even this approach can mask substantial differences in factors, such as tenure and labour market experience, that we know are important for determining earnings.
- The more comparisons are like for like and factor out main determinants of earnings such as hours worked, education and tenure the more useful the estimates are.
- We should avoid estimates based on weekly / annual earnings where a substantial proportion of the earnings gap will be attributed to differences in hours worked.