

Even money? Trends in earnings and income inequalities in Scotland and the UK, 1997-2016

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Caveats ahoy!

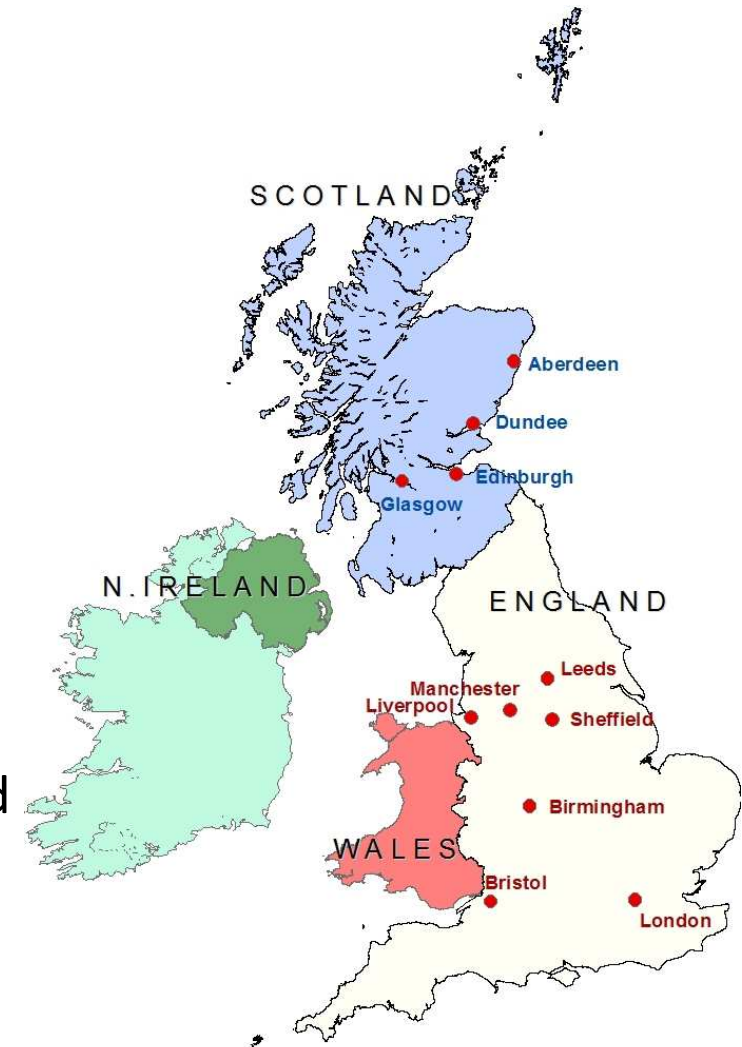
- Economic statistics...
- Focussing mainly on earnings data (rather than broader household income)

Why analyse earnings data?

- Earnings are a major component of income
- Clear links between income (inequalities) and health (inequalities)
 - Income inequality as a 'fundamental cause' of health inequality (Link *et al* (and many more))
- Need to narrow income (and broader socio-economic) inequalities to narrow health inequalities
- So need to **understand** the nature of those socio-economic inequalities
- Earnings data allow in-depth, detailed analyses...

What data?

- ASHE – ONS' Annual Survey of Hours and Earnings
 - 1% sample of all employee jobs from HMRC PAYE records
 - Excludes self-employed (and, er, non-tax-payers)
- Trends in earnings inequalities 1997-2016 for:
 - 4 UK nations: Scotland, England, Wales, N. Ireland
 - 4 Scottish cities: Glasgow, Edinburgh, Aberdeen and Dundee
 - 7 (largest) cities in England: Liverpool, Manchester, Birmingham, Leeds, Sheffield, Bristol and London



Looking at what?

- Distribution of earnings over time
 - trends in absolute and relative inequalities
 - all, full-time, and part-time employment
- (By occupation type)
- Public vs. private sectors
- Low pay
- Gender inequalities in all the above

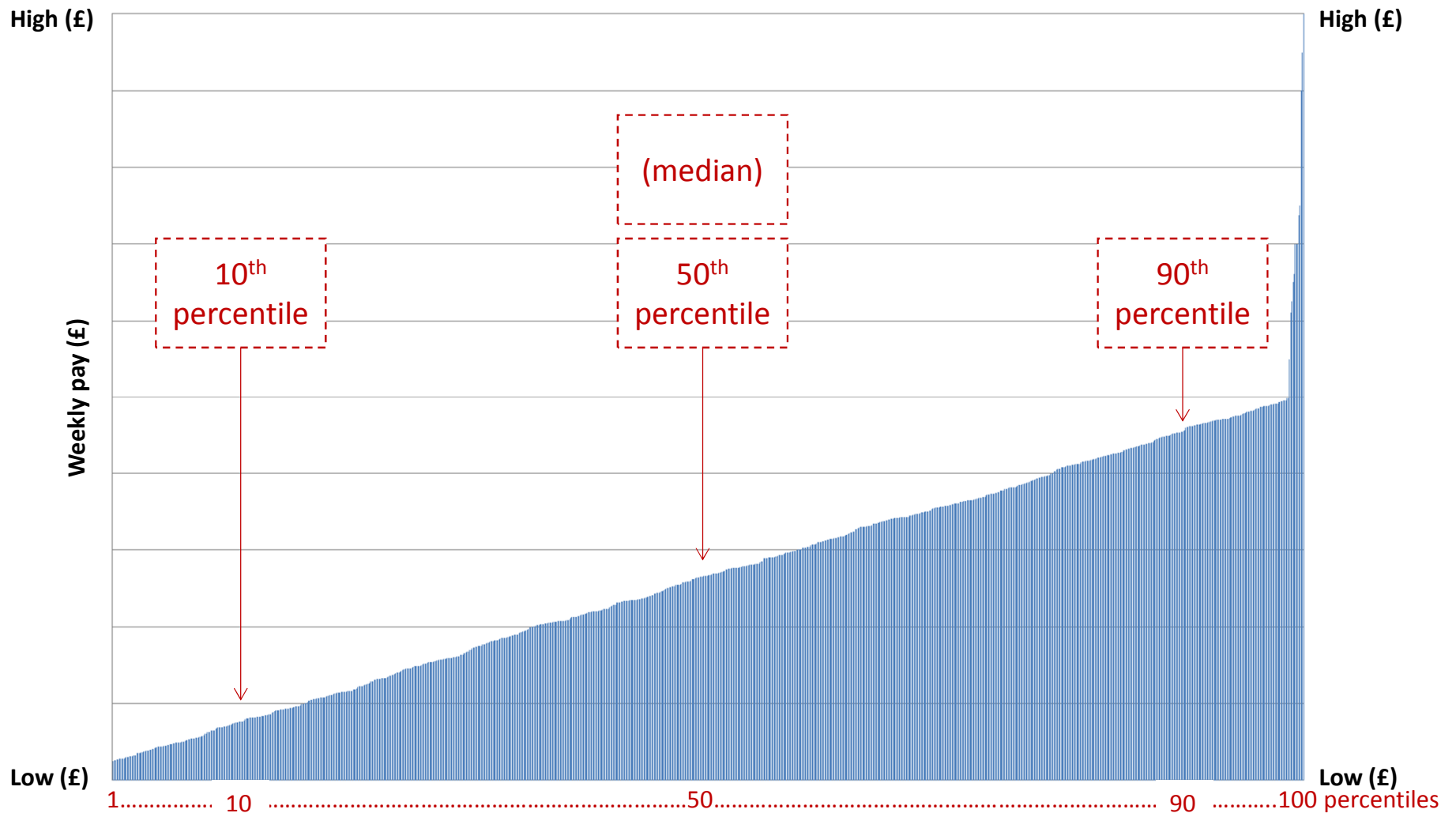
NB Er, very (mercifully) brief examples of all the above today...

Dull definitional stuff (stay awake – it's still early)

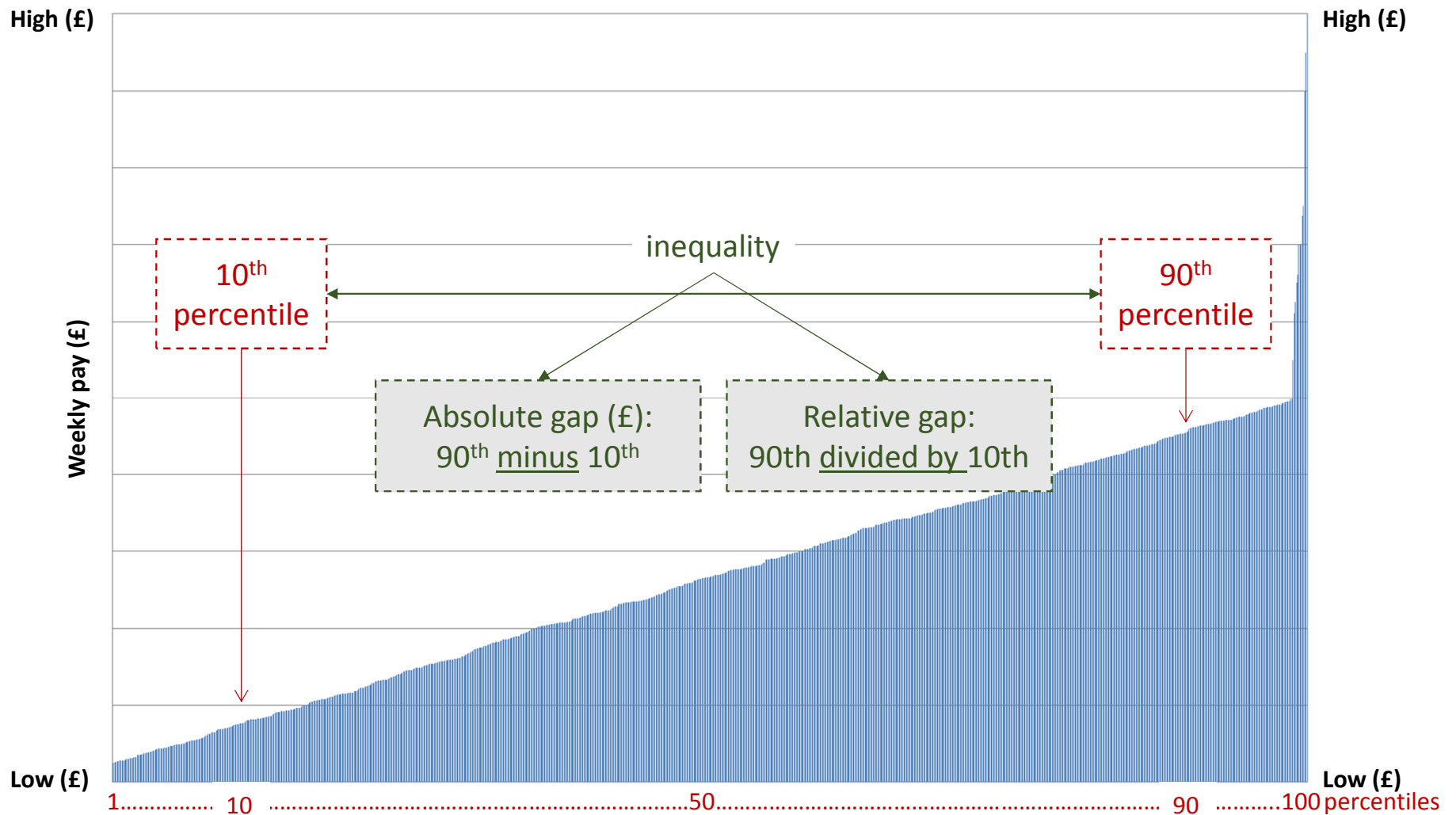
- Gross weekly pay
- All earnings adjusted for inflation to 2016 prices (using CPI index)
- Analyses mainly by percentiles (10th through to 90th)
- Crude measures of inequality:
 - Absolute gap = $90^{\text{th}} - 10^{\text{th}}$
 - Relative gap = $90^{\text{th}} / 10^{\text{th}}$

Bluffers' guide to the statistical measures
used

Made up data: 1% sample of all weekly earnings



Made up data: 1% sample of all weekly earnings



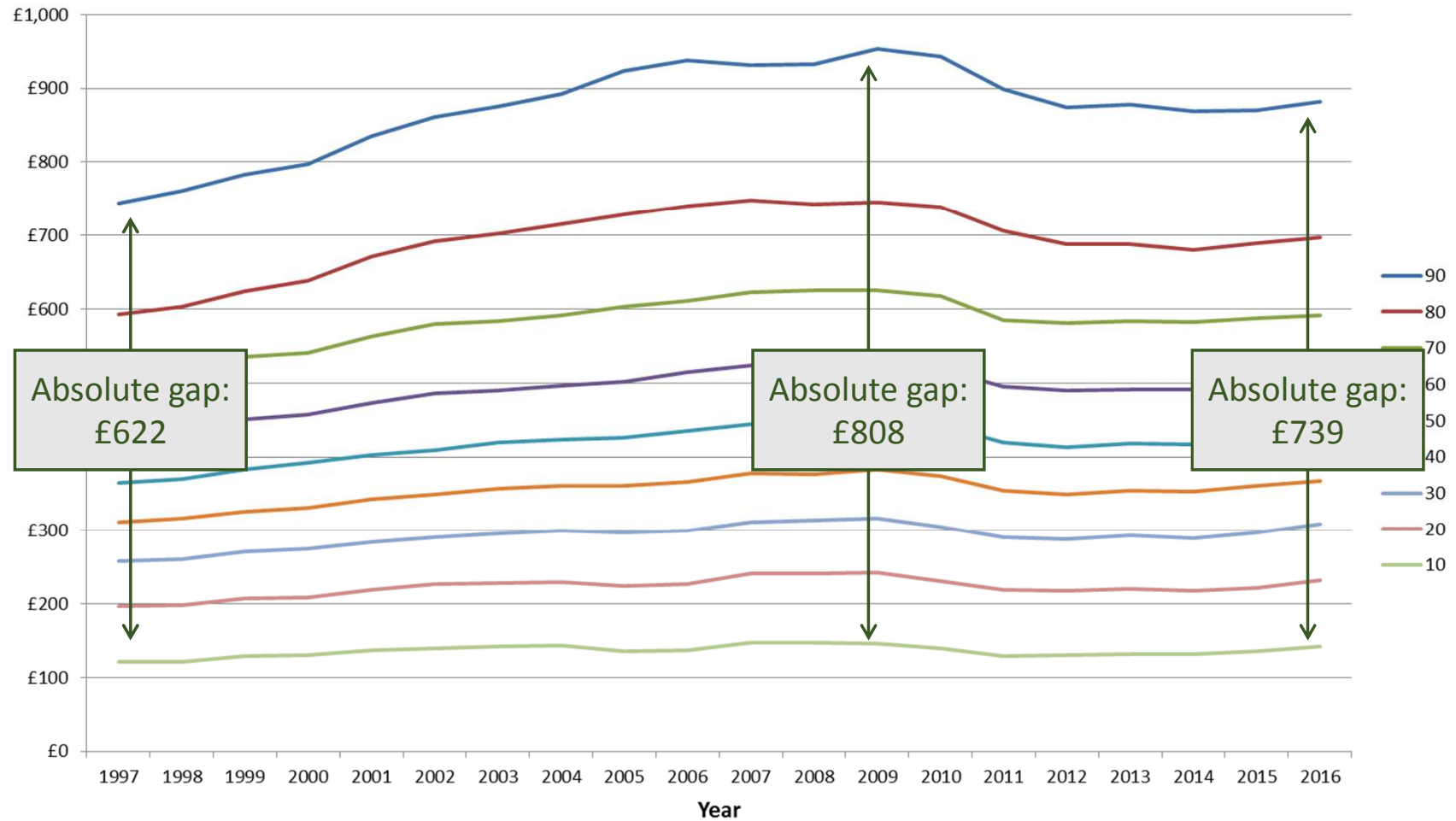
Let the graphs begin
(sorry...)

1. Changes in distribution of earnings

Earnings distribution 1997-2016, all jobs

Gross weekly pay (2016 prices) by percentile, all jobs, Scotland 1997-2016

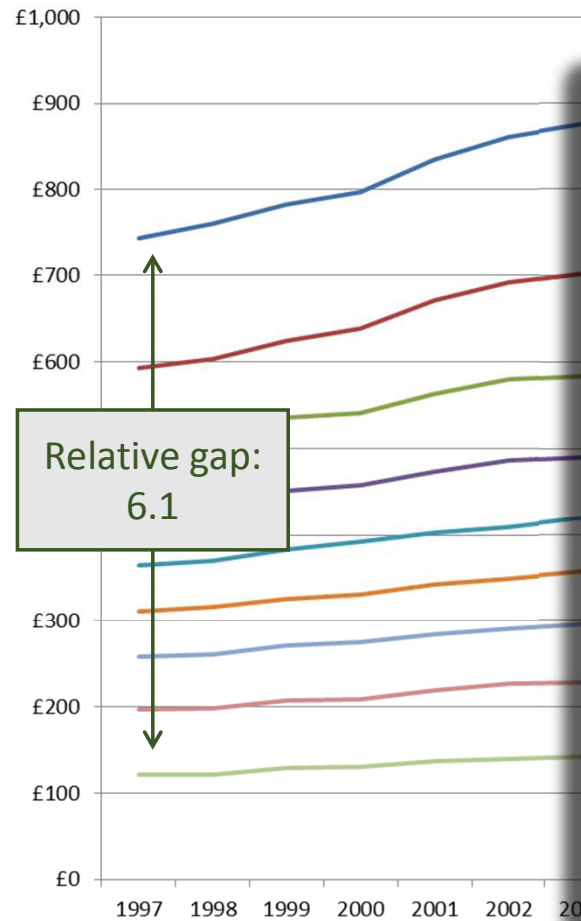
Source: ONS Annual Survey of Hours & Earnings (ASHE)



Earnings distribution 1997-2016, all jobs

Gross weekly pay (2016 prices) by percentile, all jobs, Scotland 1997-2016

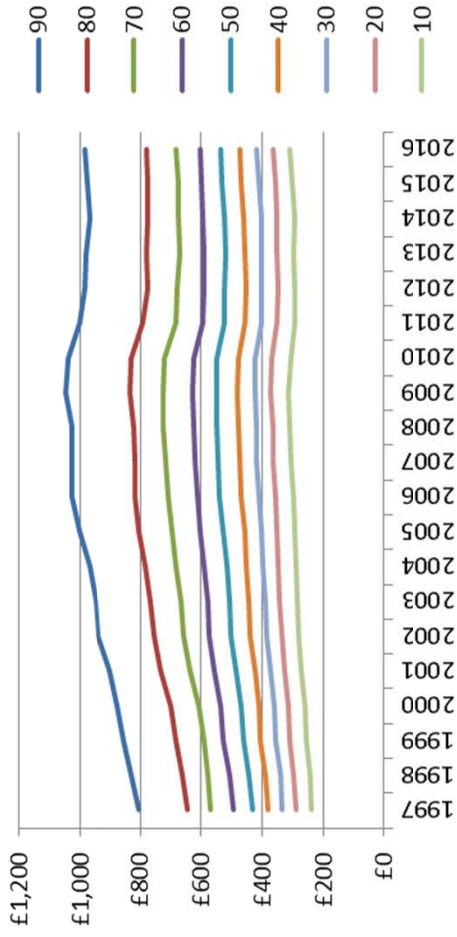
Source: ONS Annual Survey of Hours & Earnings (ASHE)



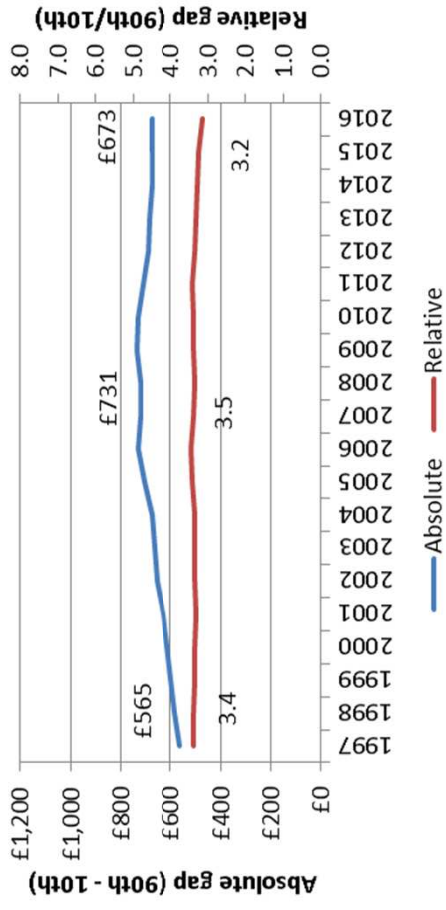
Absolute and relative inequalities, full-time & part-time employment

Full-time

Scotland percentiles: full-time jobs

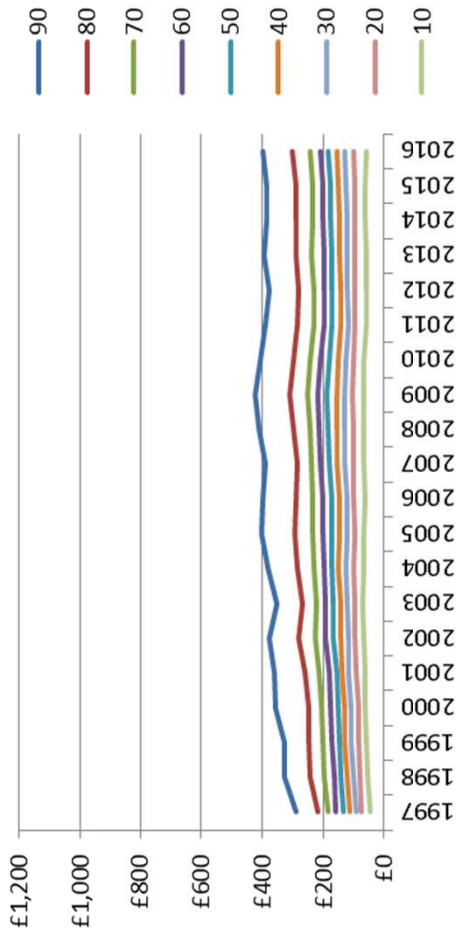


Scotland inequalities: full-time jobs

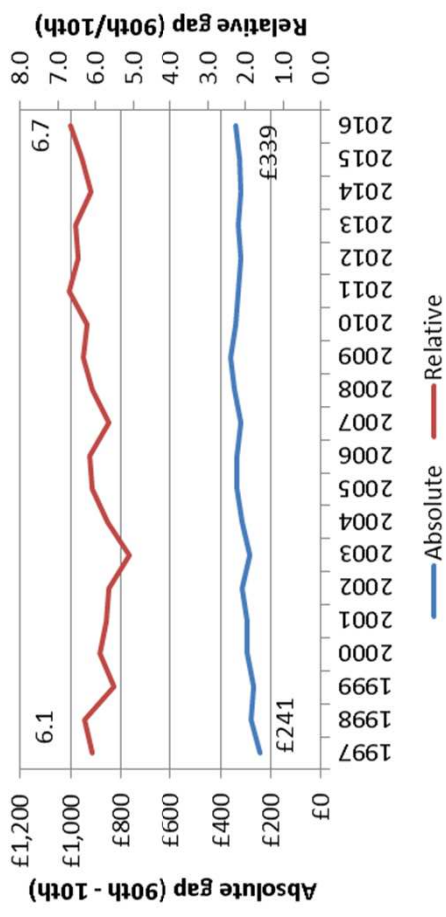


Part-time

Scotland percentiles: part-time jobs



Scotland inequalities: part-time jobs



1. Changes in distribution of earnings

Summary of key points

- Impact of recession on earnings and (previously widening) inequalities
- Overall no reduction in inequalities
 - absolute inequalities have widened

2. Earnings in public vs. private sectors

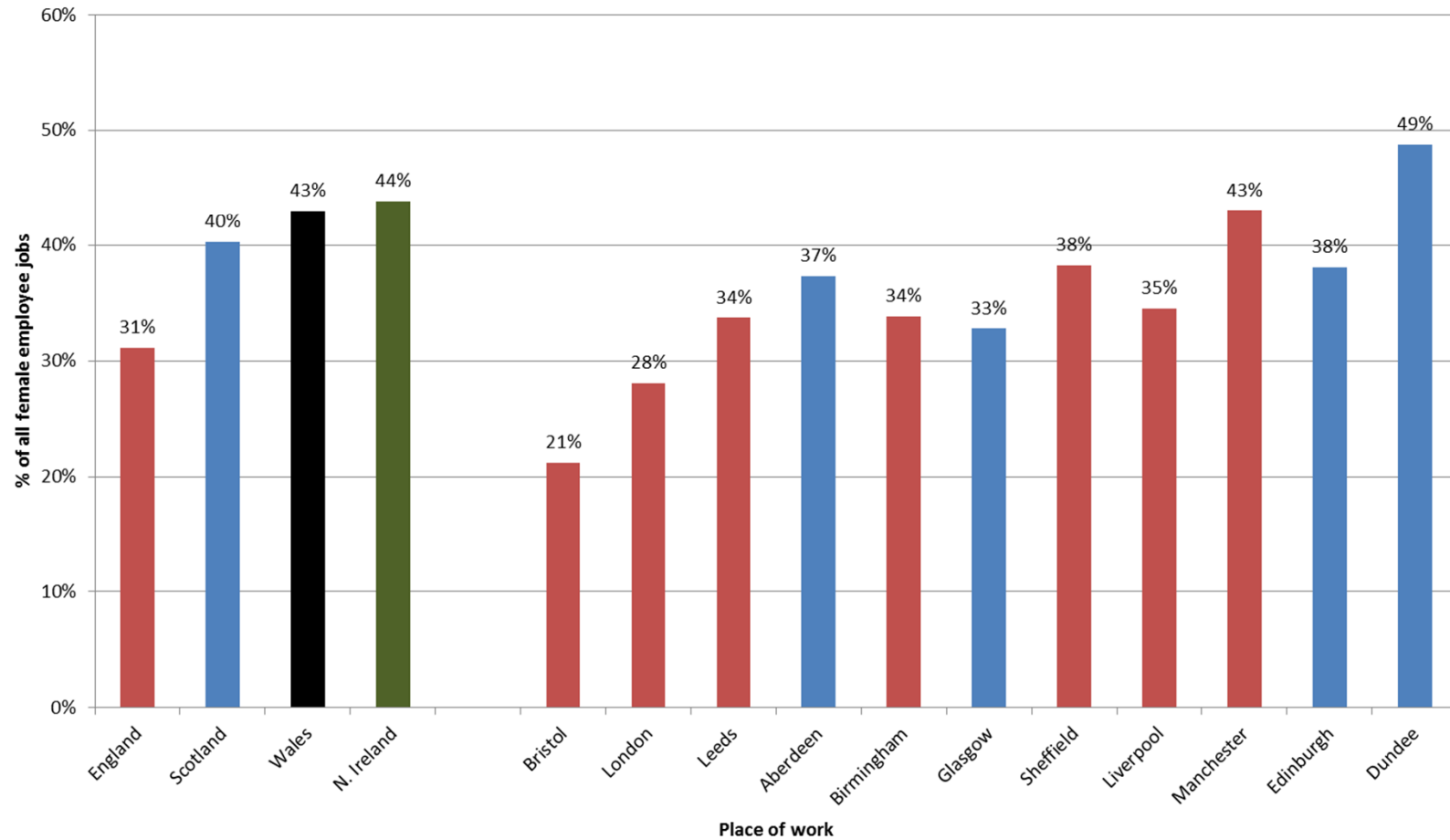
a) Size of public employment sector

- Public sector jobs account for large proportion of all employee jobs in Scotland...

% of all employee jobs in public sector

Female employee jobs: % in public sector, 2016

Source: ONS Annual Survey of Hours & Earnings (ASHE)



a) Size of public employment sector

- Public sector jobs account for large proportion of all employee jobs in Scotland...
 - Approximately one in three of all employee jobs
 - 40% of all *female* employee jobs
- So *in theory* there is considerable potential for narrowing income inequalities...
- (...more so than in England?)

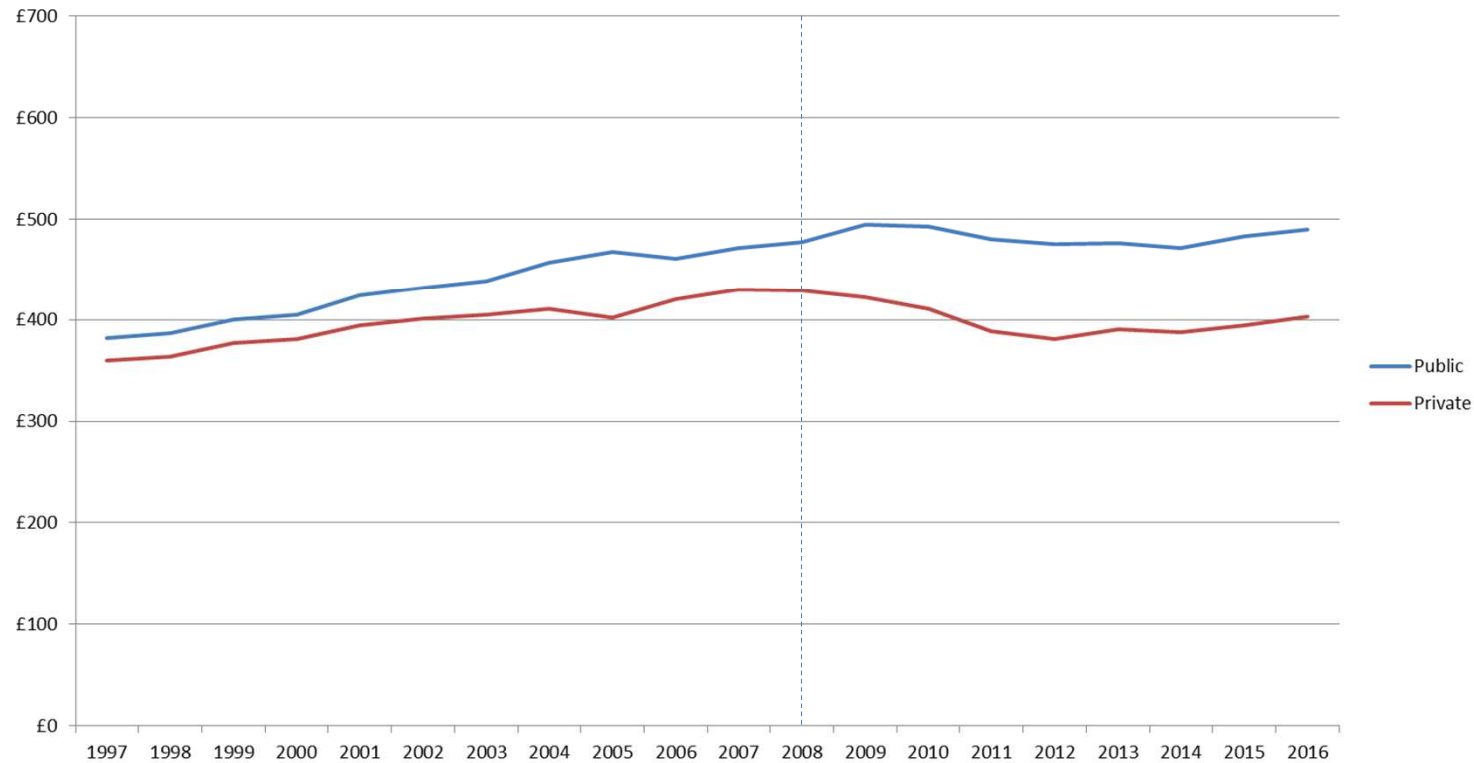
b) Public vs. private sectors: median earnings

- Bigger impact of recession on private sector
- Higher median earnings in public sector

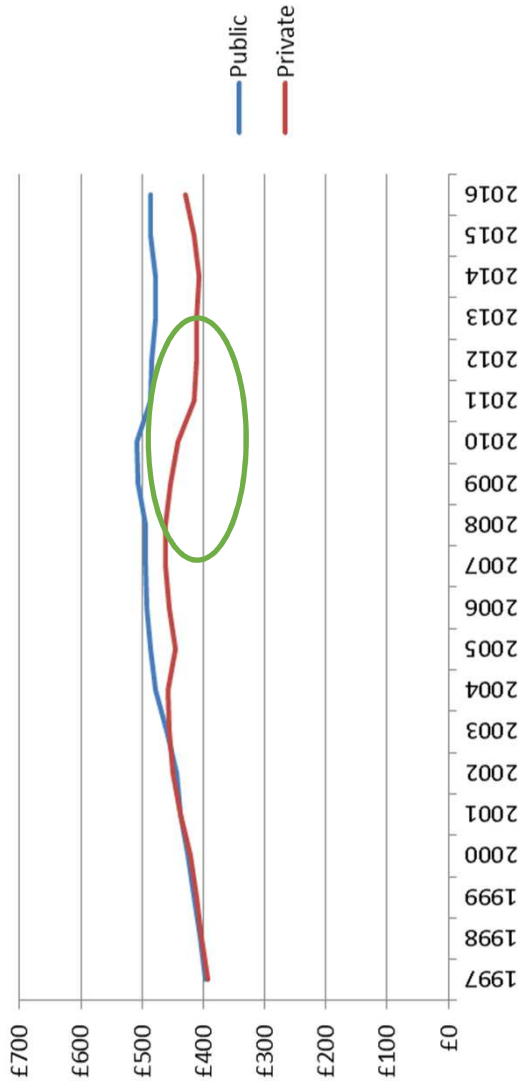
b) Public vs. private sectors: median earnings

Median gross weekly earnings (2016 prices), all jobs, public & private sectors, Scotland, 1997-2016.

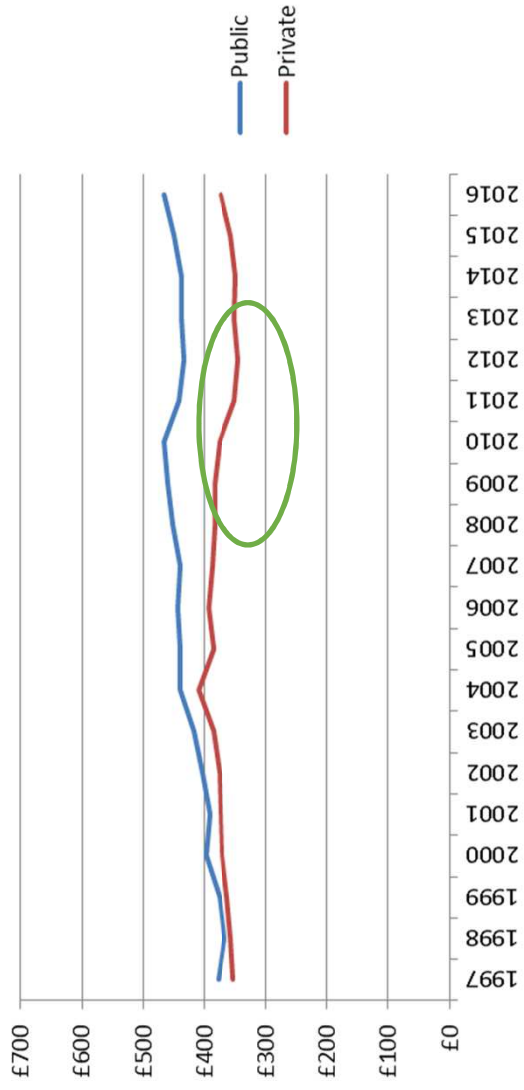
Source: ONS Annual Survey of Hours & Earnings (ASHE)



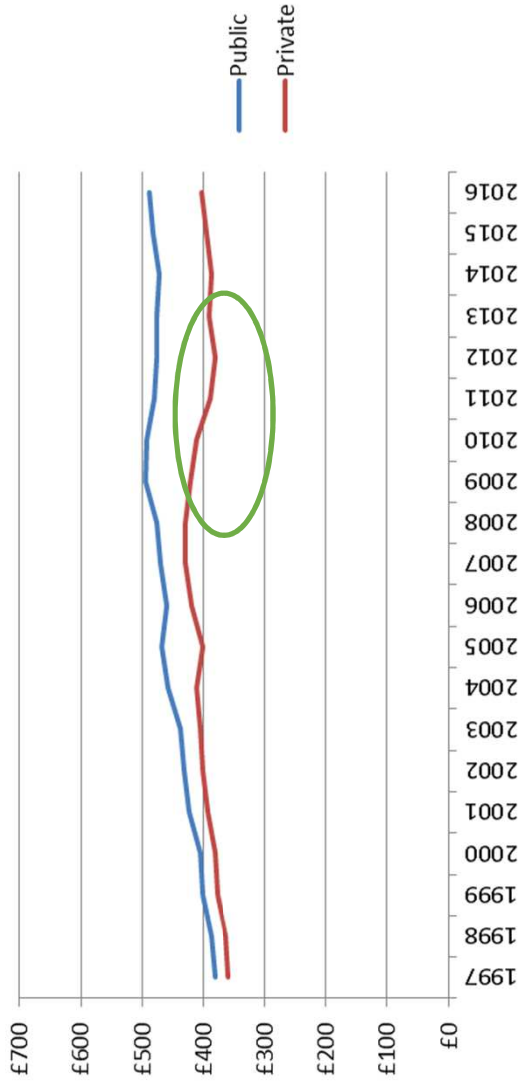
England



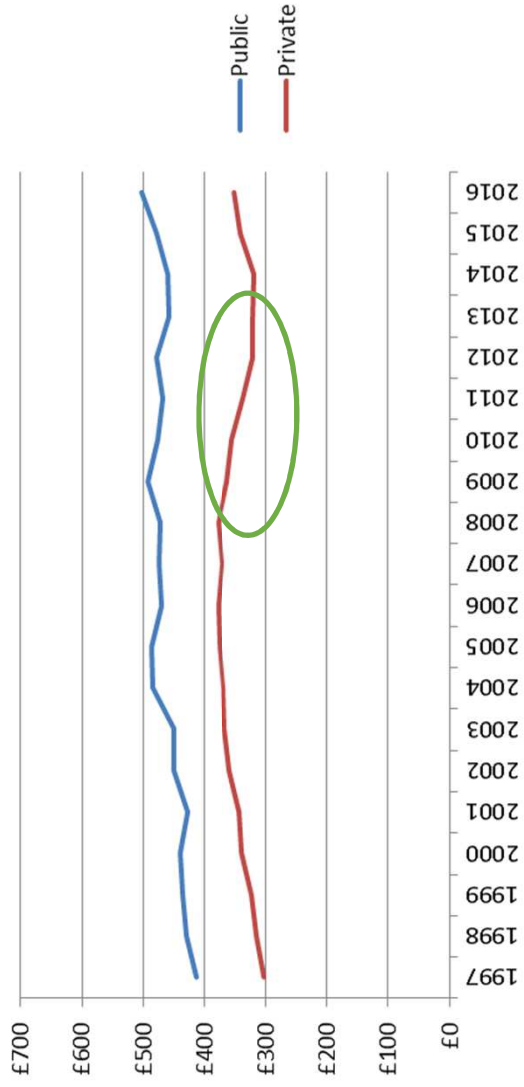
Wales



Scotland



N. Ireland



b) Public vs. private sectors: median earnings

- Similar trend for full-time jobs
- Wider gap for part-time employment...

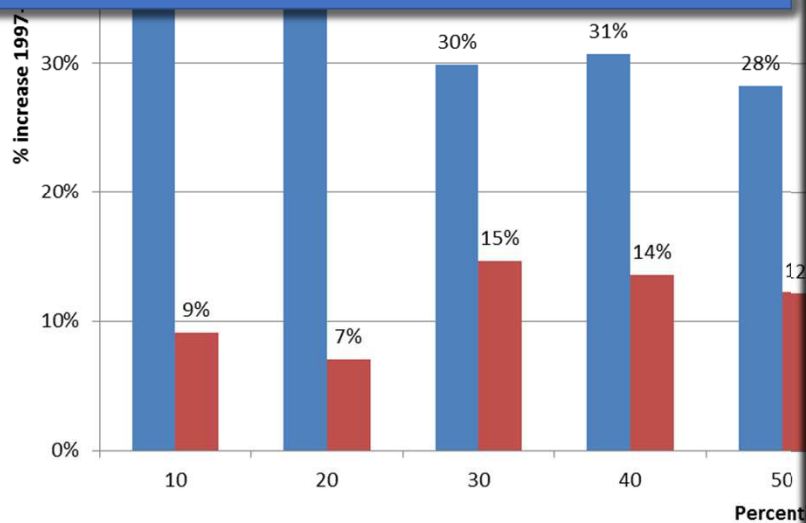
c) Public vs. private sectors: earnings distribution

- Changes over time in the **whole distribution** of earnings between public and private sectors...

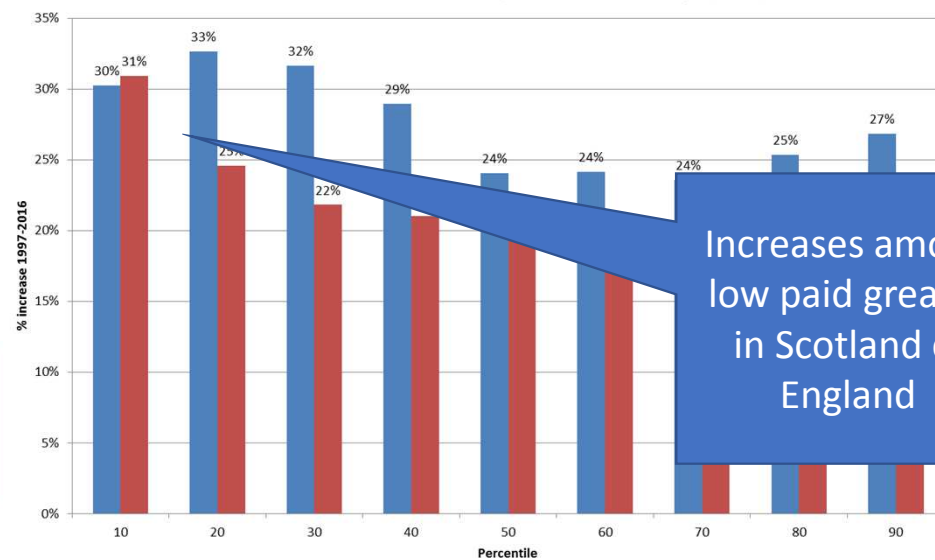
Public vs. private sectors: % increase in earnings

This is particularly driven by big increases for the lowest paid part-time workers. But it's broadly true of full-time jobs too...

Between 1997 and 2016 in the public and private sectors, all jobs, Scotland
Source: Annual Survey of Hours & Earnings (ASHE)



% increase in gross weekly earnings between 1997 and 2016 in the public and private sectors by percentile, full-time jobs, Scotland
Source: ONS Annual Survey of Hours & Earnings (ASHE)



Increases among low paid greater in Scotland cf England

2. Earnings in public vs. private sectors

Summary of key points

- Scale of public sector workforce in Scotland offers opportunities
- Private sector (associated with less secure employment) more affected by recession
- Widening gap in median earnings between two sectors
- Bigger increases among poorest paid in public sector (especially in Scotland)
 - So some narrowing of inequalities in that sector

3. Low pay

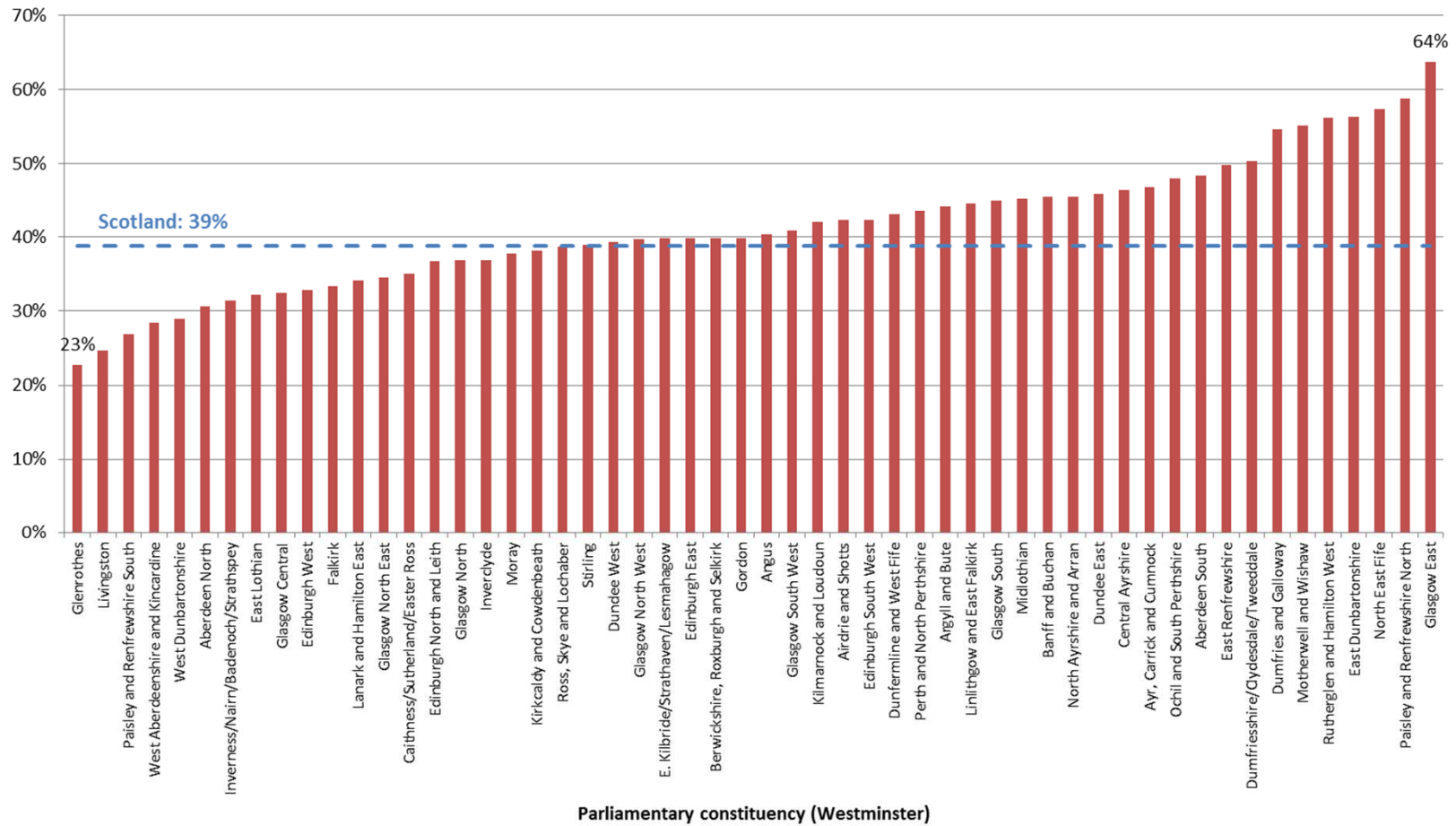
Low pay: % earning below 'real' living wage

- Living Wage Foundation: £8.25 per hour (outside London) (2016)
- In 2016 **almost half a million** Scottish jobs were paid below that level
 - One in five of all jobs
 - 40% of part-time jobs
 - But with a lot of variation across the country...

Low pay: % earning below 'real' living wage

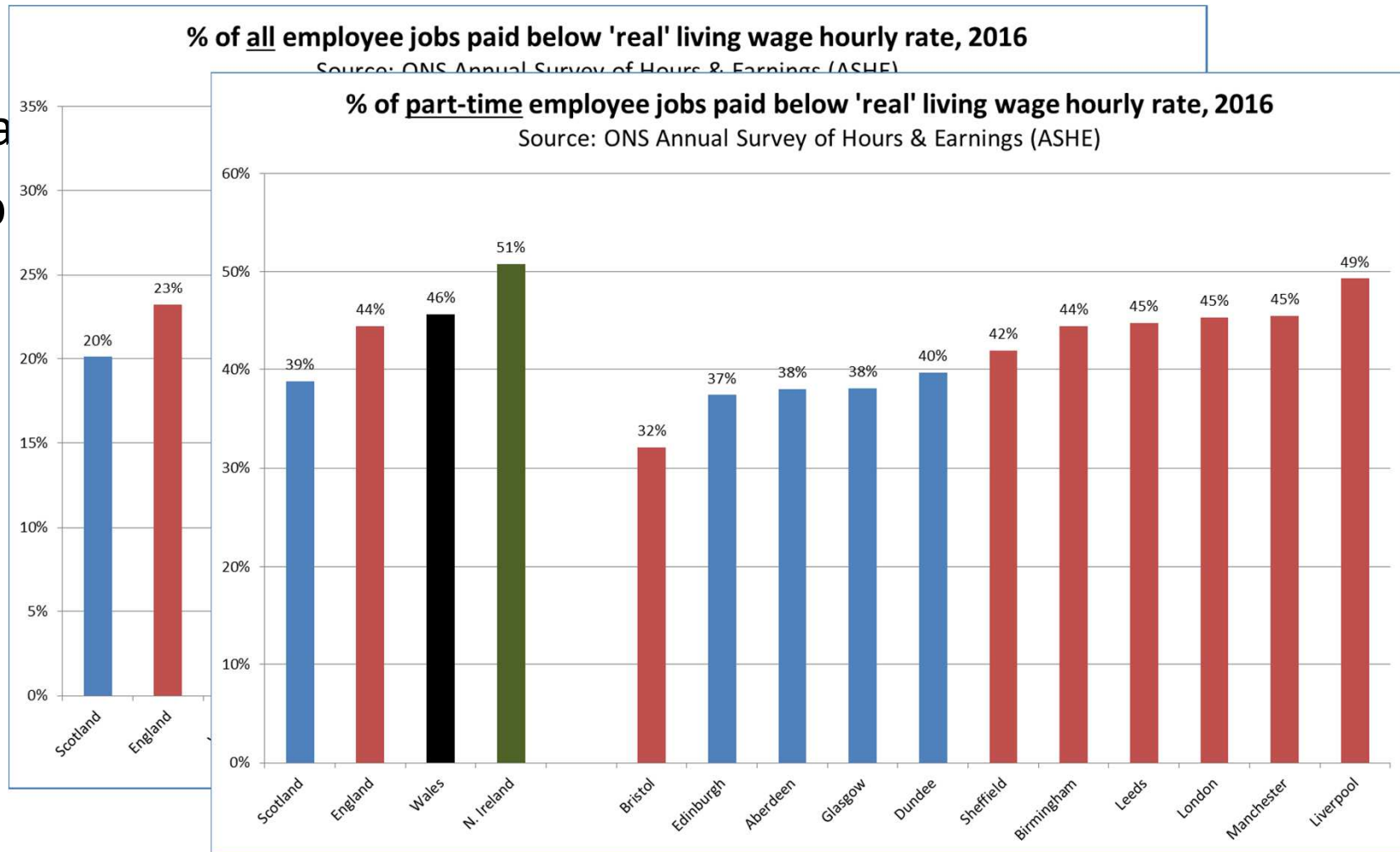
% of part-time jobs paid below 'real' living wage hourly rate, Scotland 2016

Source: ONS Annual Survey of Hours & Earnings (ASHE)



Low pay: % earning below 'real' living wage

- Sca
- ...b



3. Low pay

Summary of key points:

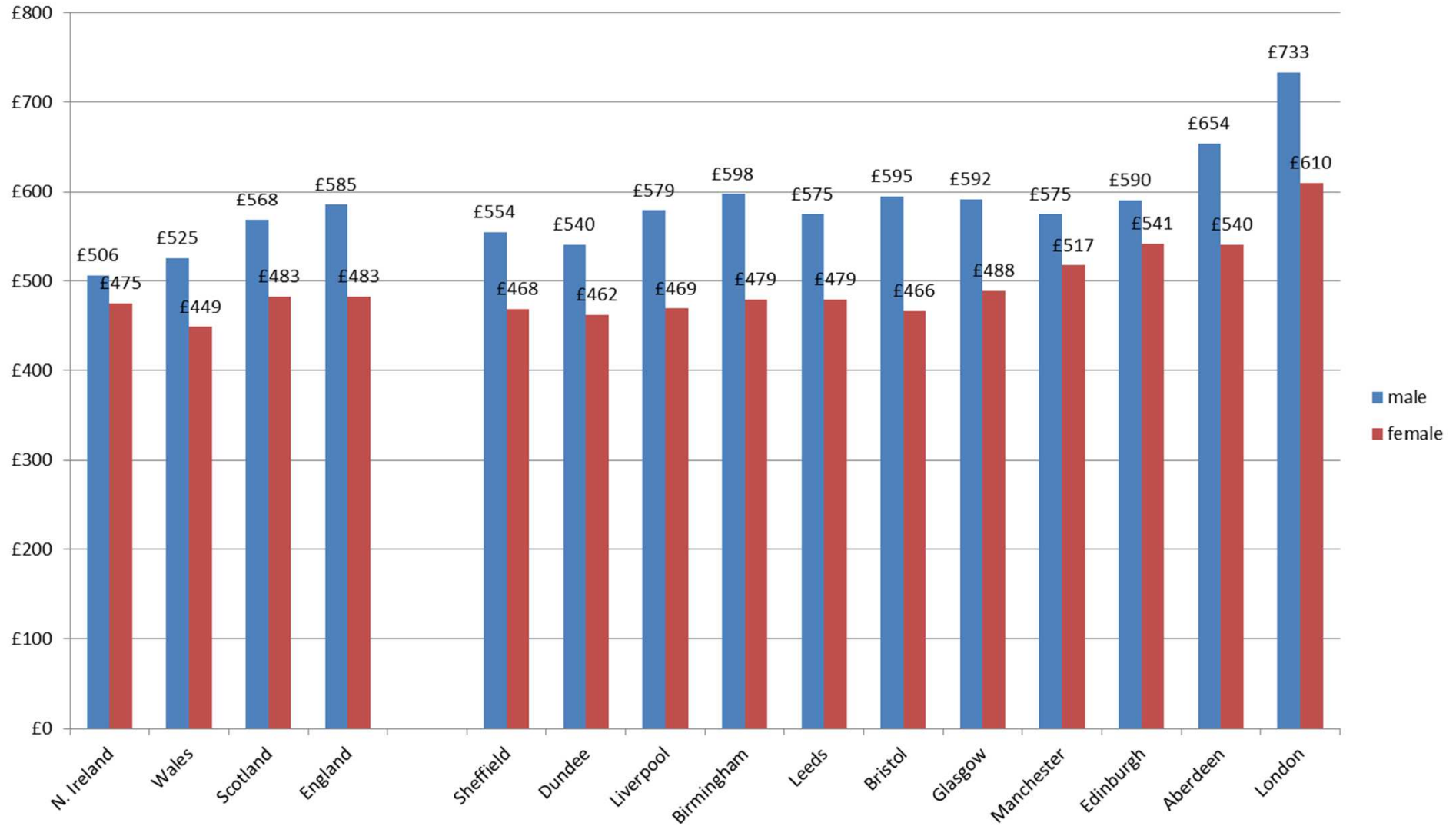
- Scale of low pay is considerable
- But worse elsewhere in the UK
- And possibly improving to a (slightly) better degree in Scotland

4. Gender inequalities in earnings

(Er, as described by a man...)

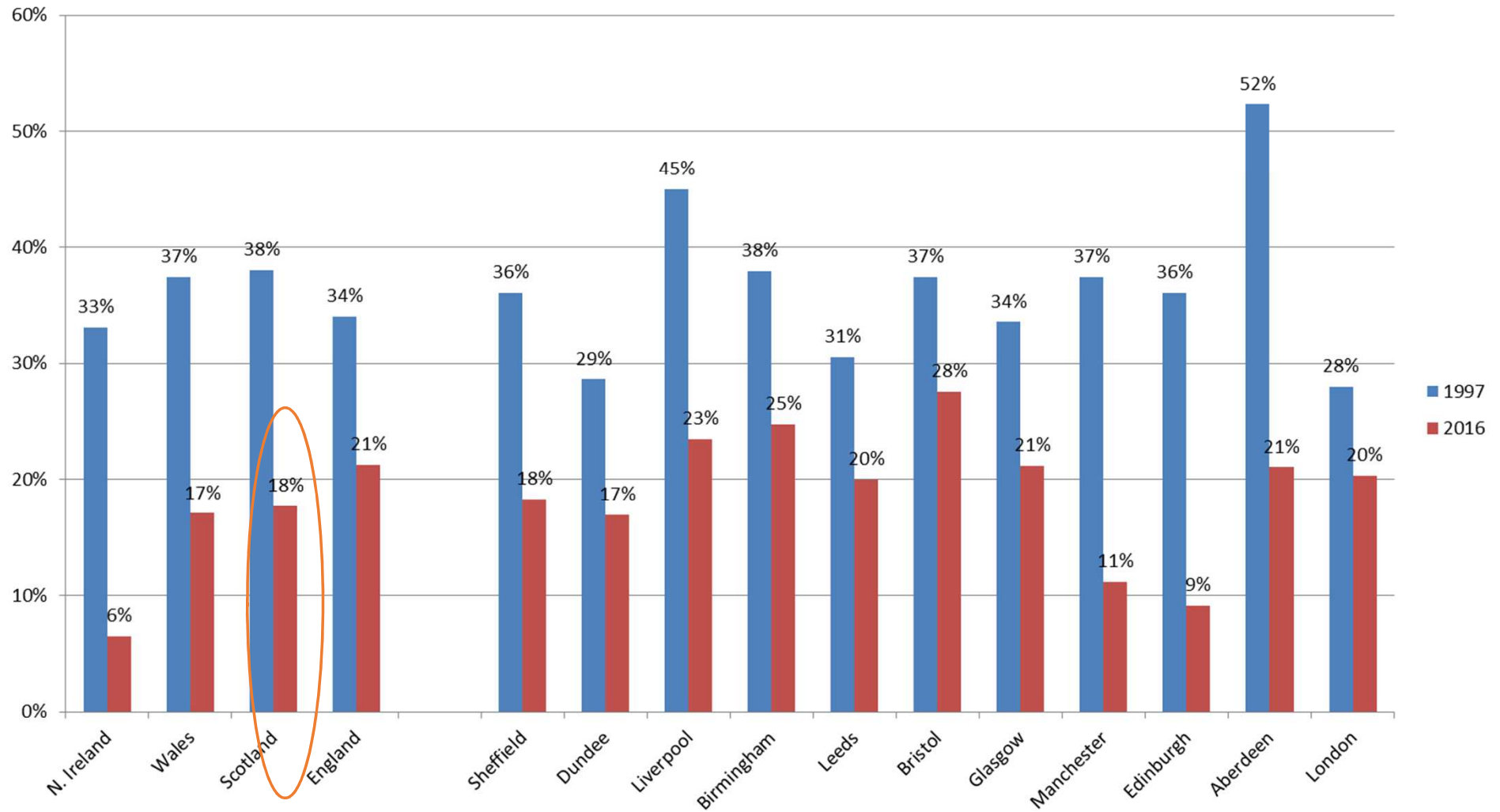
Gross median weekly pay 2016, male & female full-time jobs

Source: ONS Annual Survey of Hours & Earnings (ASHE)



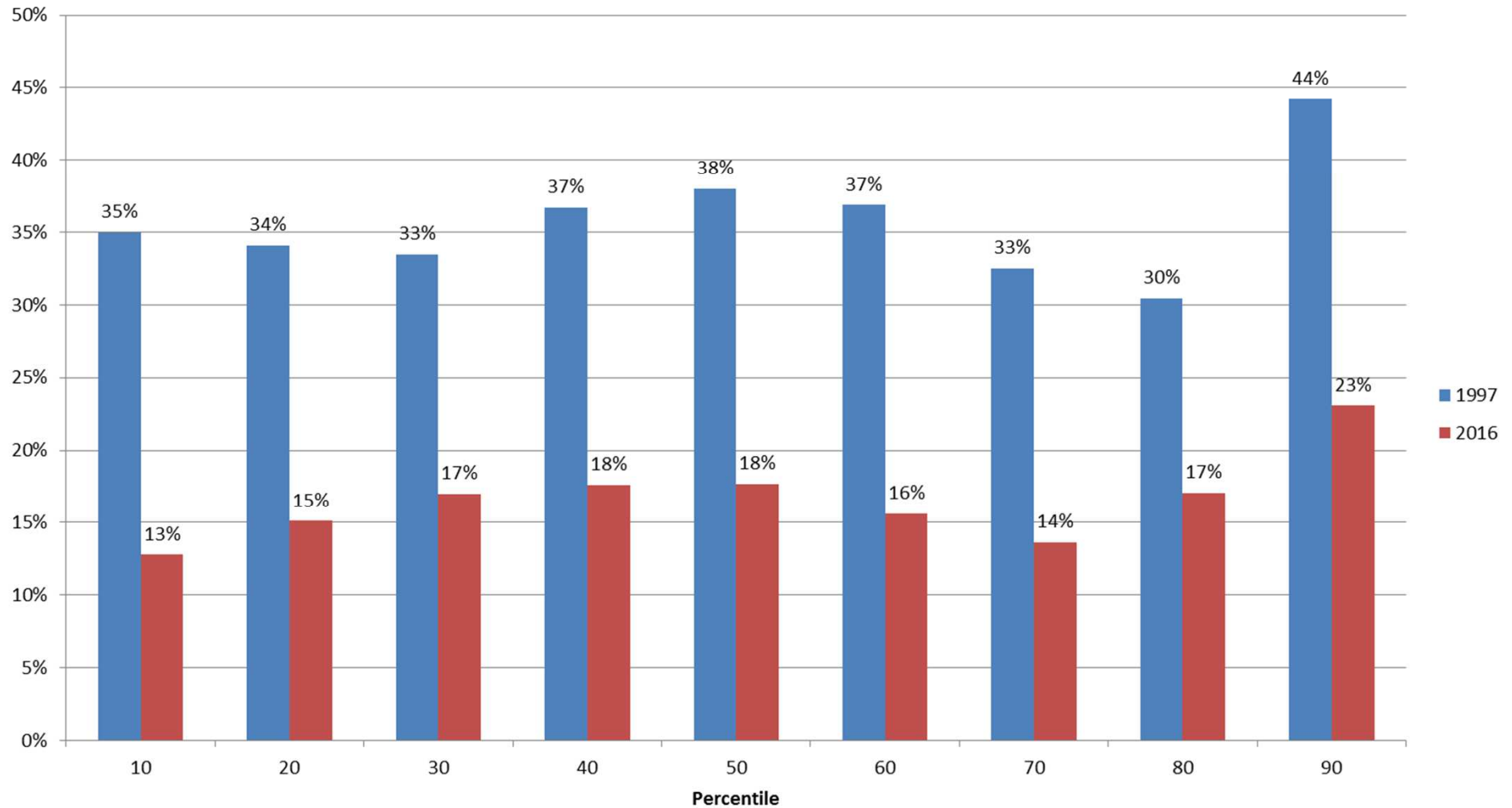
Gross median weekly pay, 1997 and 2016: % difference between male and female full-time earnings

Source: ONS Annual Survey of Hours & Earnings (ASHE)

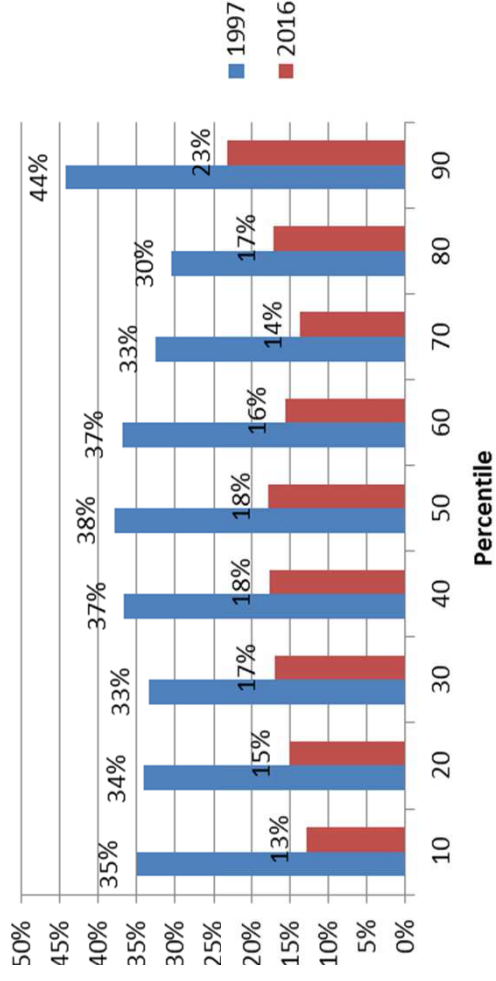


% difference in male and female gross full-time weekly earnings, Scotland, 1997 and 2016.

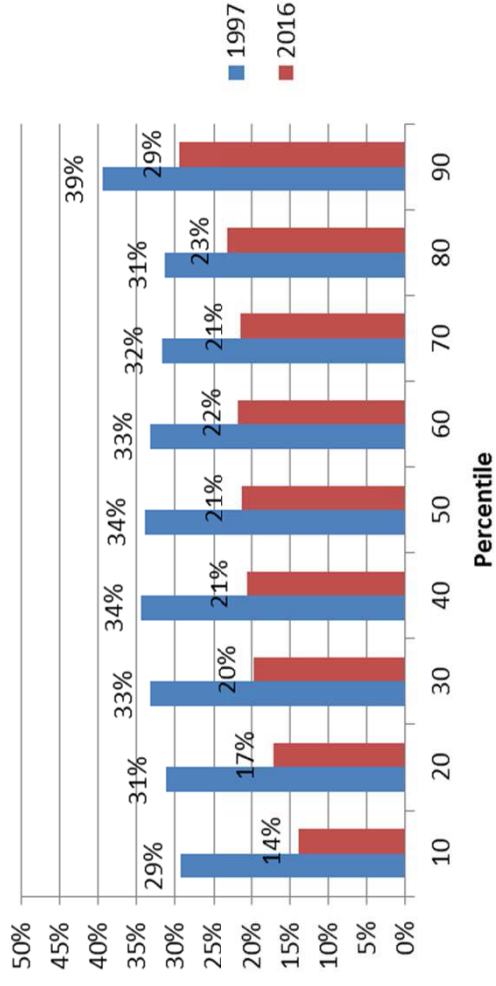
Source: ONS Annual Survey of Hours & Earnings (ASHE).



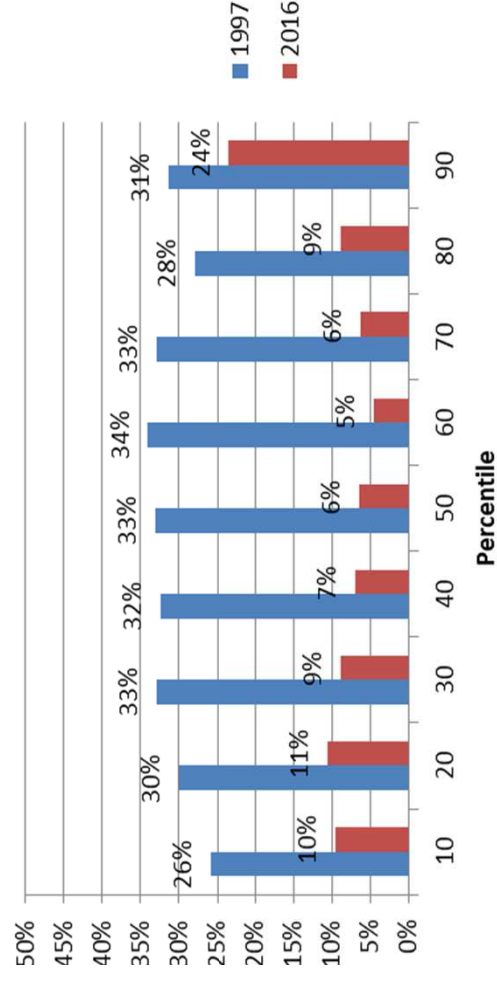
Scotland



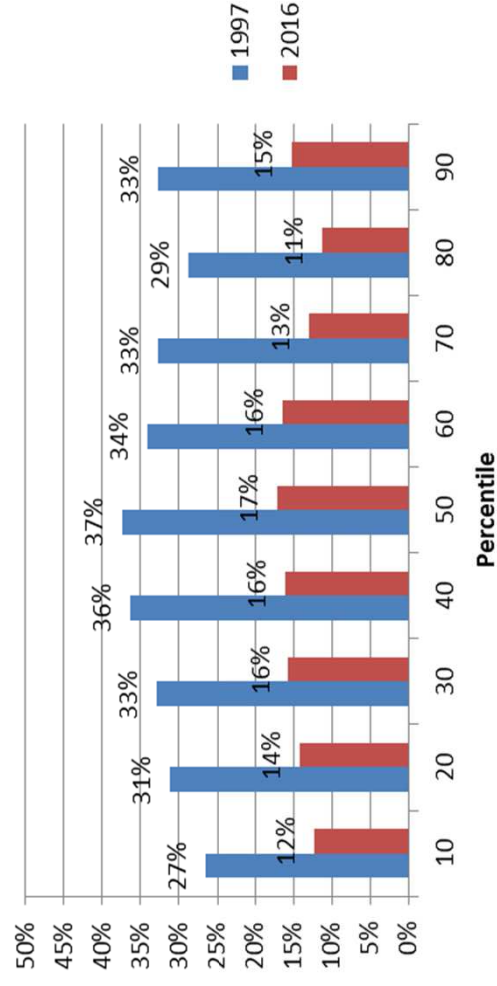
England



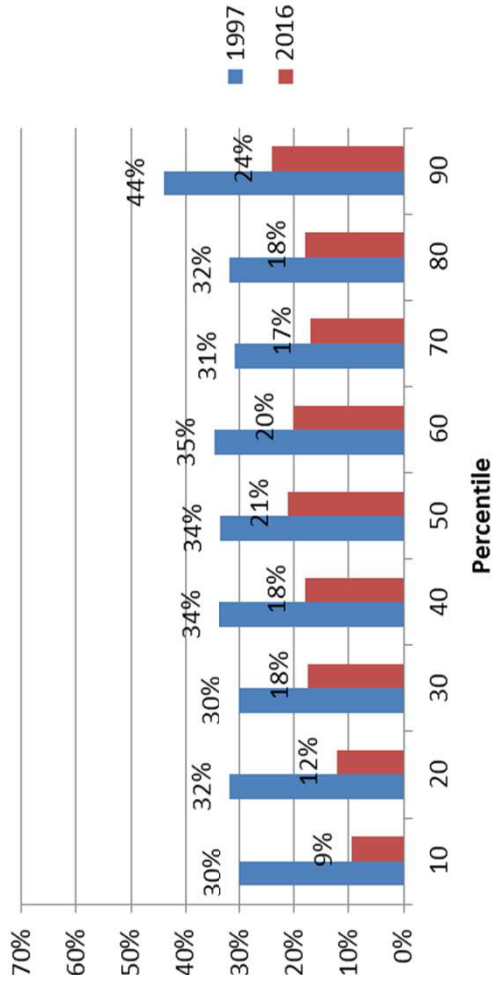
N. Ireland



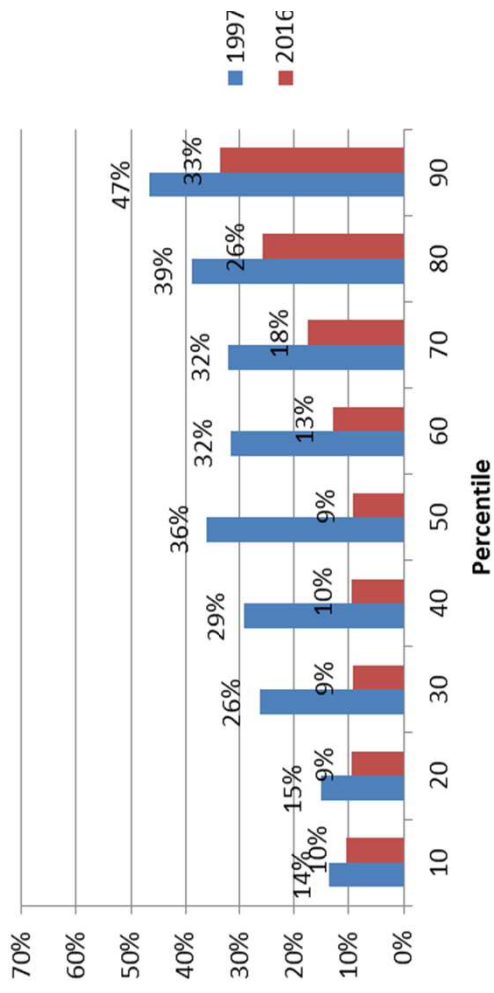
Wales



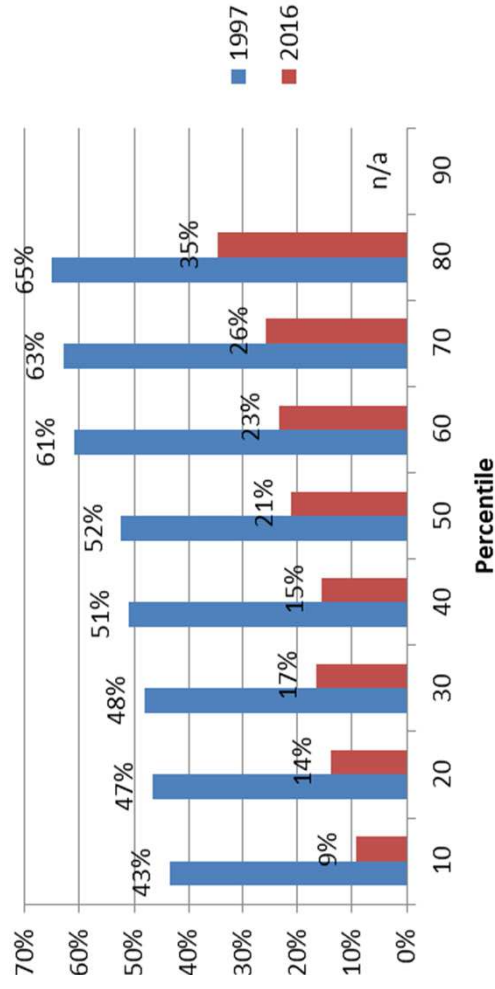
Glasgow



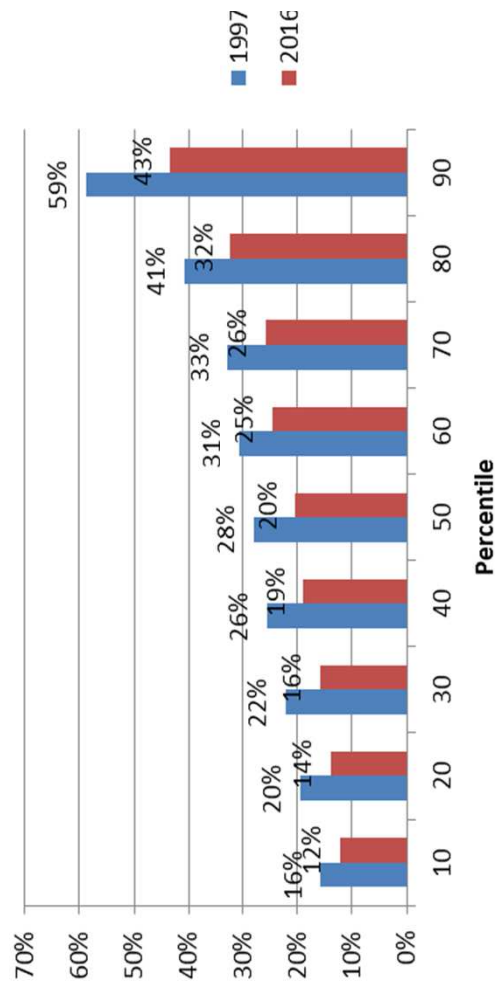
Edinburgh



Aberdeen



London

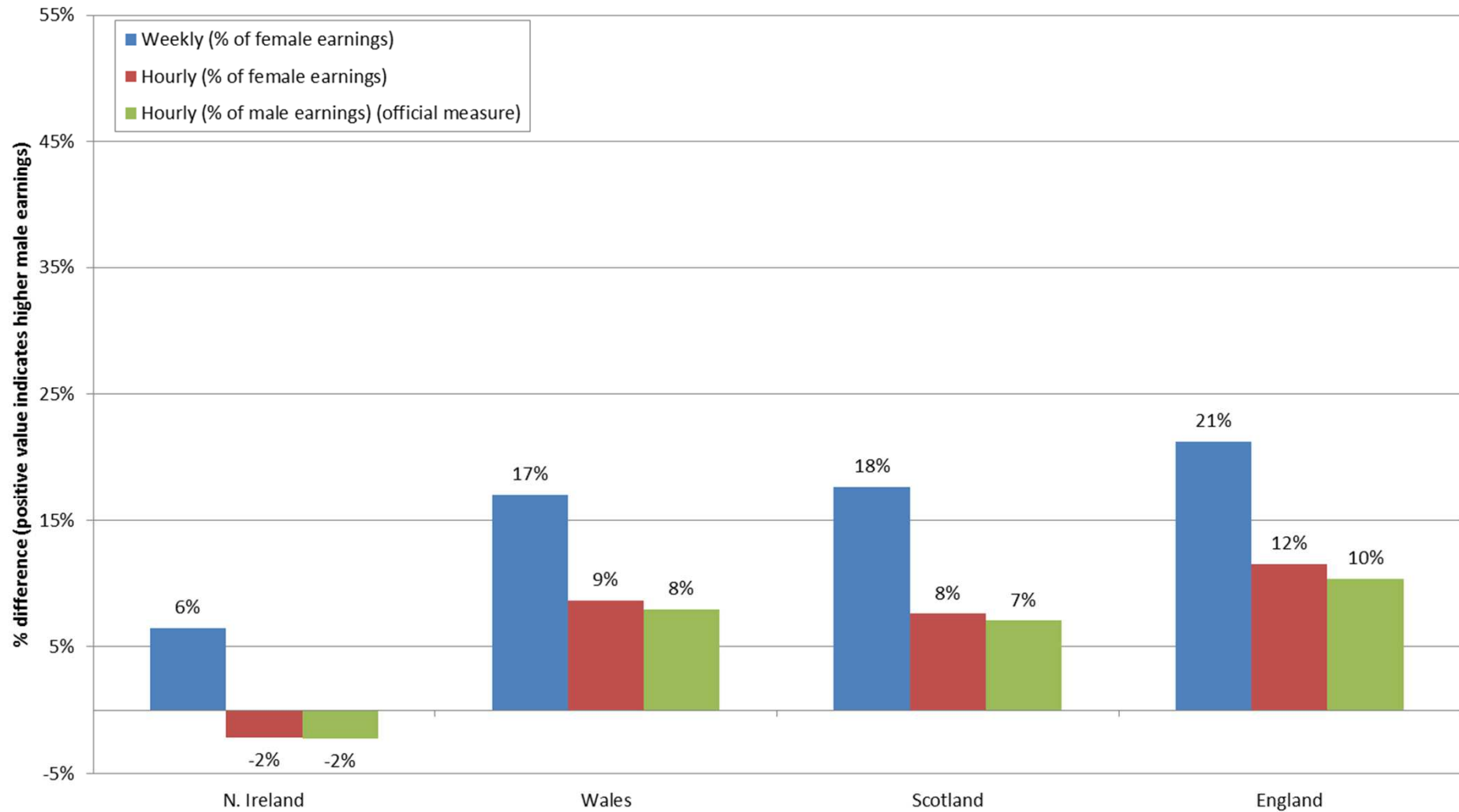


c) Lies, damned lies and statistics

- Size of the gap depends on the statistical measure used
- 'Official' measure uses:
 - Hourly (not weekly) earnings
 - Full-time only
 - Gap shown as percentage of *male* earnings
- But what is gender inequality?
- One of its many facets is disproportionate level of caring responsibilities which impacts on numbers of hours worked
- How you understand gender inequality influences:
 - choice of statistical measure, and therefore...
 - ...the size of the gap...

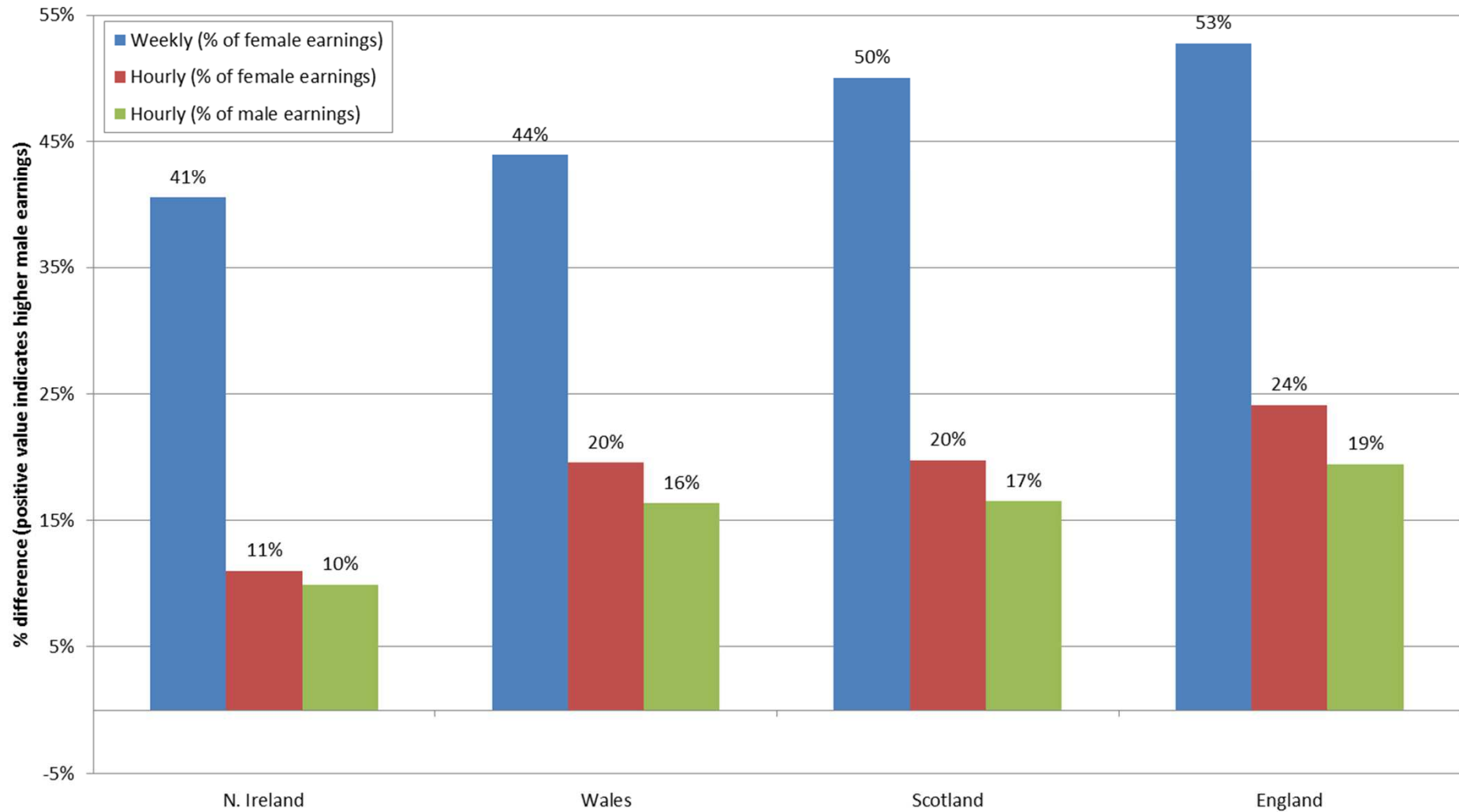
Different measures of gender gap: gross median earnings (full-time jobs), Scotland, England, N. Ireland and Wales, 2016

Source: ONS Annual Survey of Hours & Earnings (ASHE).



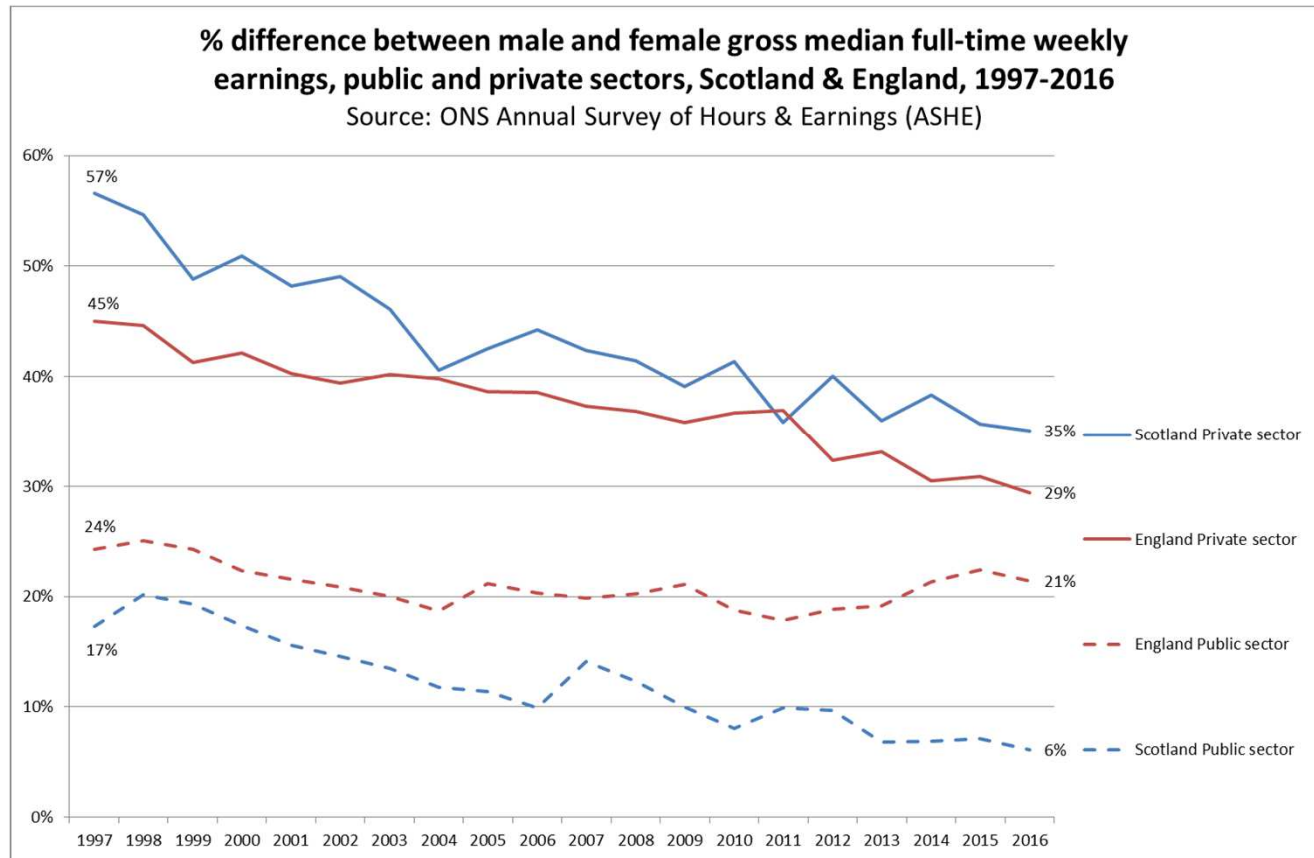
Different measures of gender gap: gross median earnings (all jobs), Scotland, England, N. Ireland and Wales, 2016

Source: ONS Annual Survey of Hours & Earnings (ASHE).

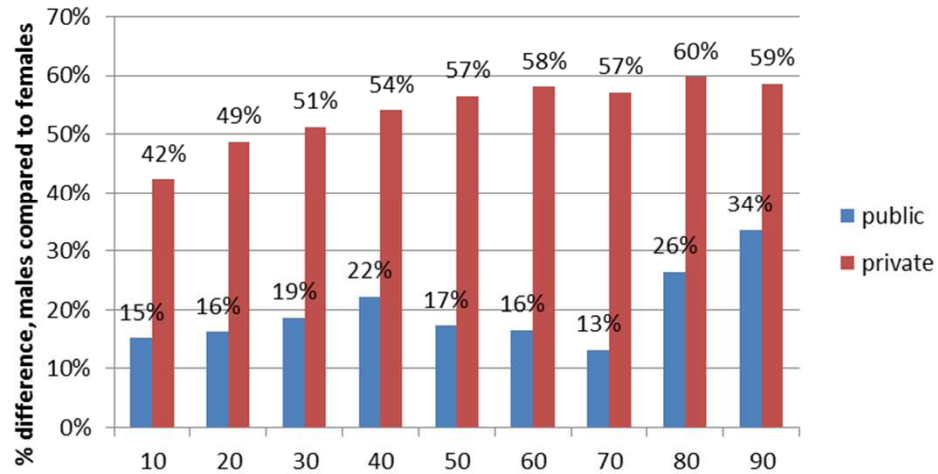


d) Gender inequality: public vs. private sector (NB full time, weekly)

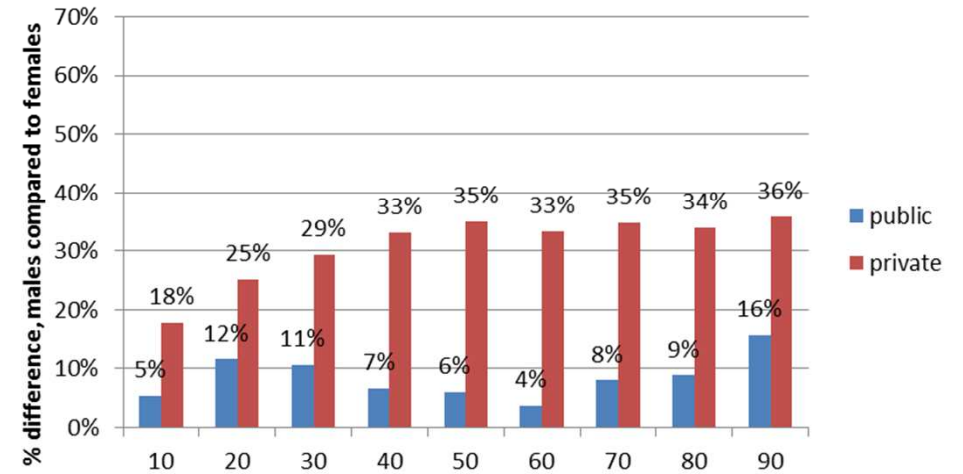
- Gender gap has reduced in both public and private sectors
 - But remains much larger in private sector
 - Greater decrease in public sector in Scotland cf England



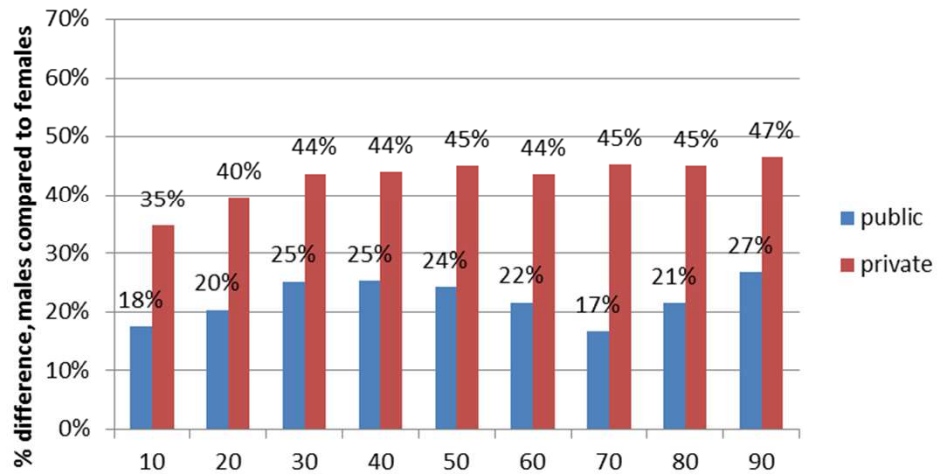
Scotland, 1997



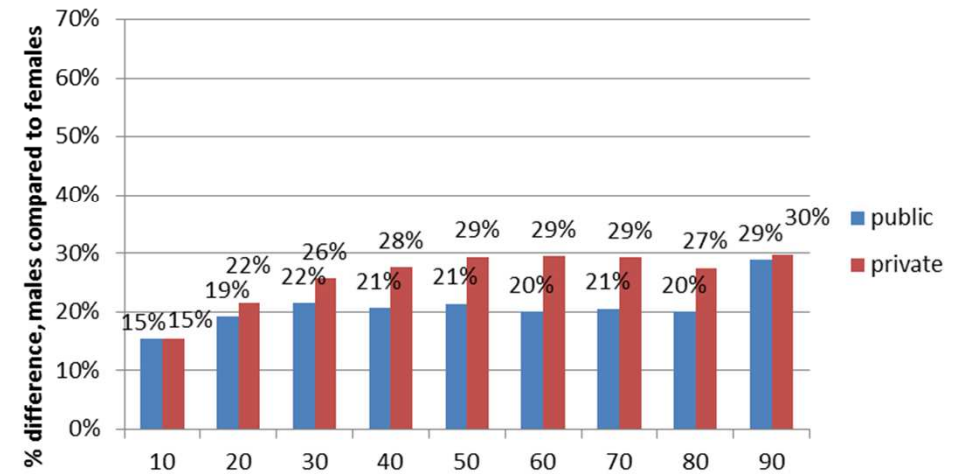
Scotland, 2016



England, 1997

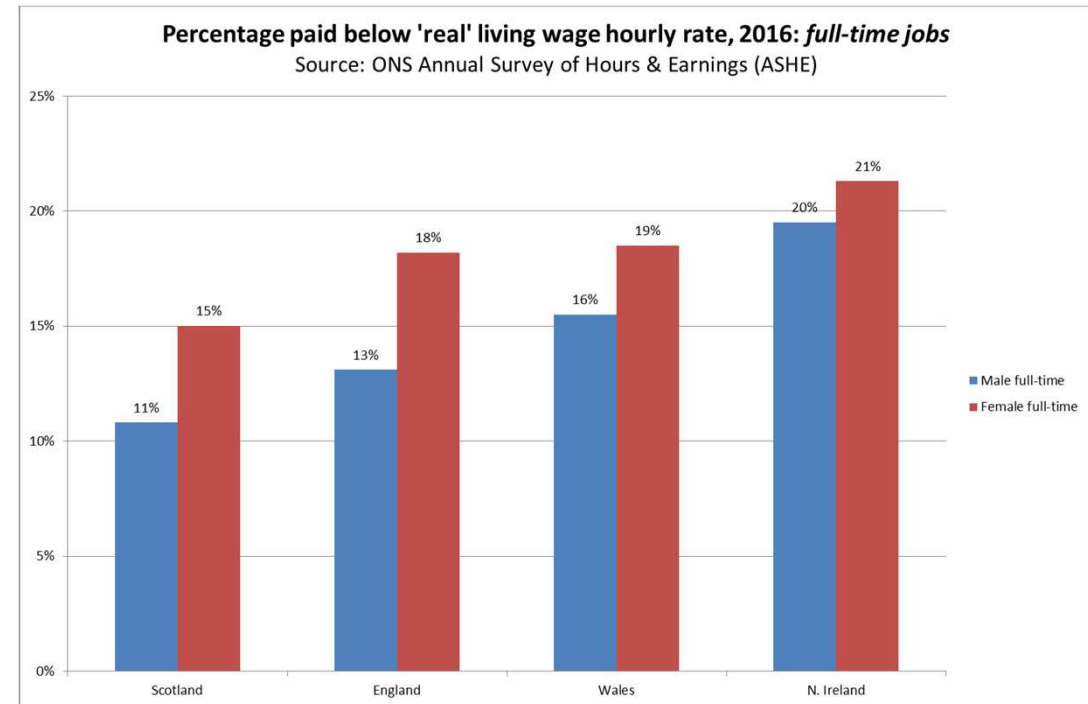


England, 2016



e) Gender inequality: low pay

- Lowest paid jobs predominantly held by women
- Around two thirds of all jobs paid below *minimum wage* e.g...
- Around two thirds of all jobs paid below *real living wage* e.g...
- Not just about part-time work: more women in low paid *full-time* jobs too...



4. Gender inequalities in earnings

Summary of key points:

- Size of gender gap depends on statistical measure used
- For full-time weekly earnings it's still very high (e.g. 18% in Scotland in 2016)
- But it has decreased considerably over past 20 years everywhere
- Lower gap in public sector than private sector
 - Bigger reduction in public sector in Scotland than in England
- Biggest gap among higher earners
- Lowest paid jobs predominantly held by women

Will these graphs ever stop?

- Yes. It's over.

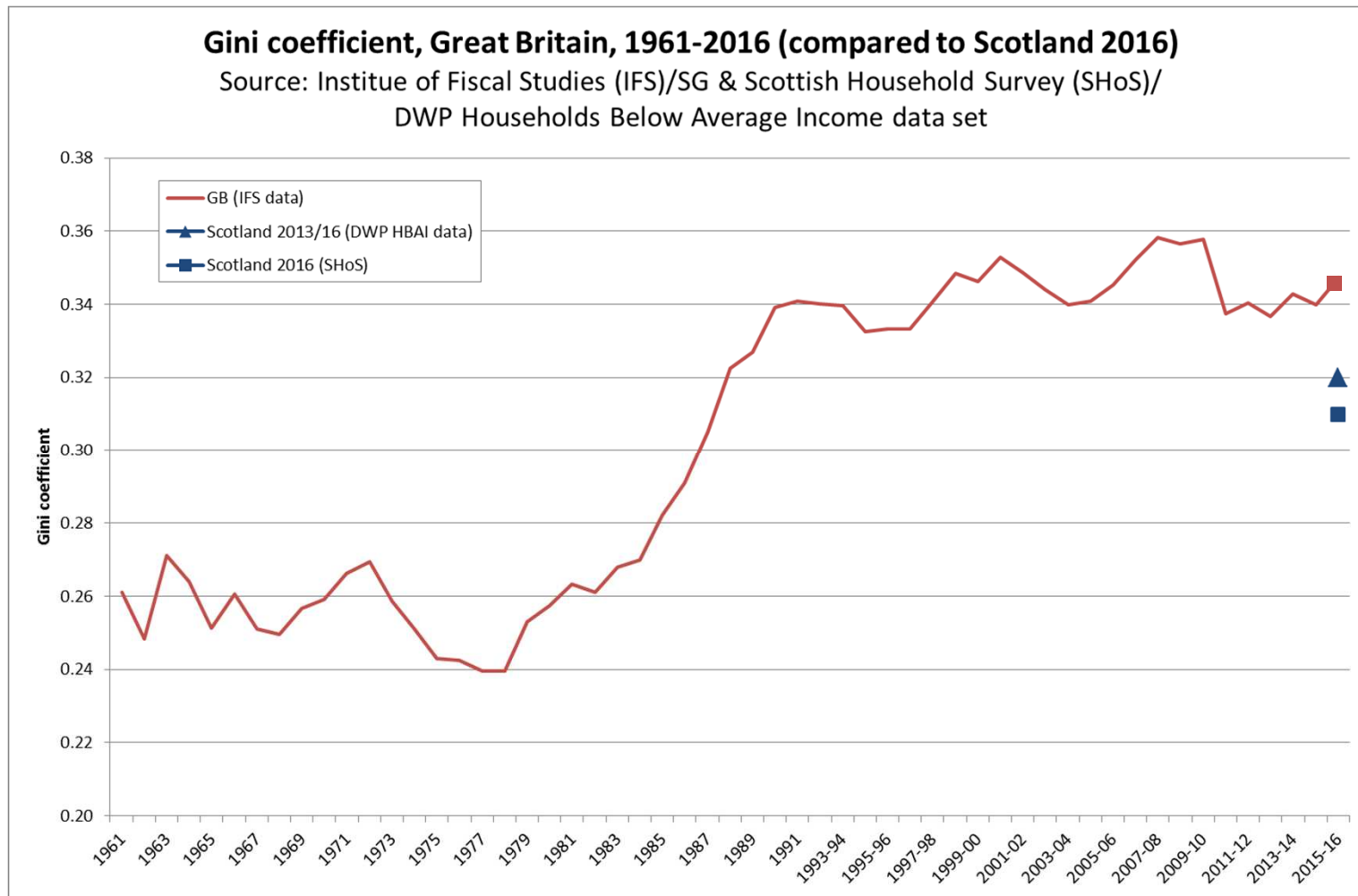
Caveats ahoy! (again)

- A lot of caveats associated with earnings data e.g.:
 - Excludes self-employed
 - Only one component of income
 - **Excludes unwaged – elderly, unemployed, too sick to work**
 - **So underestimates scale of inequalities**
 - Gross earnings – tells us nothing about (progressive) taxation
 - **Individual measure – tells us nothing about true household income**
- However...:
 - Very large data set not associated with problems of survey-based income data
 - NB **Overall trends in overall net household income are very similar...**
 - Very similar trends in income (impact of recession etc)
 - Similarly widening **absolute** inequalities, flat **relative** inequalities

Conclusions & implications

- Reasons for optimism:
 - Reduction in gender inequalities
 - Potential of the size of the public sector to reduce inequalities
 - Evidence of some narrowing of inequalities in public sector (more so in Scotland cf England)
 - Likely influence of initiatives like Scottish Living Wage accreditation
- Reasons for pessimism
 - The private sector
 - Income inequalities are about to get wider
 - IFS forecasts, linked to effects of UK Government 'austerity' measures
 - Child poverty in Scotland estimated to rise to 38% by 2030
 - So health inequalities will widen further too
 - The scale of what's required..

Income inequalities in the UK, 1961-2016



The end

- Further detail of any of the analyses available from:
david.walsh.2@glasgow.ac.uk

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