Inequality in Britain: an explanation of recent trends

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An economic approach to inequality

The gap between “rich” and “poor”

But how should we measure it?

Why should we care about inequality?

Can we explain recent trends?
How should we measure it?

Inequality of what?
– Household income, earnings, wages, consumption, material living standards, utility?

Compare different points in the income distribution

Summary measures of the entire distribution with desirable properties
– E.g. Gini Coefficient, Mean Log Deviation
Substantial rise in inequality during the 1980s

Source: IFS
Top of income distribution races away

Source: IFS
The Gini: international comparisons

Source: OECD. Figures not directly comparable with those on other slides. Mid 80s Germany refers to West Germany.
Real earnings growth

UK (1980-2005)

Avg annual earnings growth

Switzerland (1980-2005)

Avg annual earnings growth

USA (1980-2005)

Avg annual earnings growth

France (2000-2005)

Avg annual earnings growth

Source: OECD
Notes: Full-time male workers only

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Why should we care about inequality?

Economics largely focuses on ‘Efficiency’ and ‘Pareto optimality’, says very little about ‘Equity’

Efficiency considerations for valuing inequality

– Social unrest and crime, trust and social capital, long-term generational consequences
– But some benefits as a result of incentive effects

Welfare considerations of a social planner

– What is the optimal welfare metric?
Why has inequality gone up?

There are many competing explanations for changes in inequality, including:

– Changing industrial structure, etc.
– Returns to education
– Regional changes (North/South gap)
– Demographic Change

Statistical decompositions allow us to weigh up some of these competing explanations

Results taken from Brewer, Muriel and Wren-Lewis (2010)
Inequality – subgroup decomposition

Inequality measures tell us how unequally incomes are distributed

[Diagram showing income distribution with highest and lowest ends highlighted]
Inequality – subgroup decomposition

But suppose we divide the population into subgroups (e.g. ethnic groups, or employed vs. unemployed)
Inequality – subgroup decomposition

We see that some groups have very high inequality (e.g. the self-employed)

Lowest

Income

Highest
Inequality – subgroup decomposition

And others have low inequality, with low average incomes (etc.)

While others have low inequality, but high average incomes (e.g. the employed)
Inequality – subgroup decomposition

Increasing inequality could be caused by:

Inequality increasing *within* some groups:

= “Within-group inequality” effect

Income

Lowest  Highest
Inequality – subgroup decomposition

Or increasing inequality *between* groups
Inequality – subgroup decomposition

Or increasing inequality *between* groups

(i) because their average incomes change

= “Relative income effect”
Inequality – subgroup decomposition

Or increasing inequality between groups

(ii) because more people join a group with high inequality

= “Population change (within)” effect

Lowest

Income

Highest

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Inequality – subgroup decomposition

Or increasing inequality *between* groups

(iii) because more people join groups with low (or high) incomes

= “Population change (mean)” effect

Lowest  Income  Highest
Subgroup decomposition example: by employment status of head of household

We divide the population into groups according to the schooling of the head of household:

- Left education aged 16 or under
- Left education aged 17-19
- Left education aged 20+
- Unknown or still in education

Decompose inequality changes into the four effects described earlier
## Subgroup decomposition – by education level

<table>
<thead>
<tr>
<th>Period</th>
<th>Change in overall inequality ($I_0$)</th>
<th>Within-group inequality</th>
<th>Between-group inequality</th>
<th>Relative income</th>
</tr>
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<tbody>
<tr>
<td>1978 - 84</td>
<td>18</td>
<td>13</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1984 – 88</td>
<td>42</td>
<td>34</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>1988 – 91</td>
<td>18</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991 – 95-96</td>
<td>−12</td>
<td>−13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995-96 – 2000-01</td>
<td>11</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000-01 – 04-05</td>
<td>−9</td>
<td>−10</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2004-05 – 06-07</td>
<td>10</td>
<td>10</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Mostly within group inequality important during 1980s
Subgroup decompositions can be unclear

Suppose we have the following change:
Subgroup decompositions can be unclear

Gender subgroup decomposition....

... would partly attribute it to decreasing female income
Subgroup decompositions can be unclear

Colour subgroup decomposition....

... would partly attribute to decreasing yellow income
Subgroup decompositions can be unclear

Which factor is more important?
Subgroup decompositions can be unclear

Which factor is more important?

Factor decomposition allows us to consider all factors simultaneously

Income

Lowest

Highest

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Income inequality – factor decomposition

Source: HBAI Data (FES and FRS) and authors’ analysis
What we do not know (and why it matters)

There is much we do not understand! But the answer matters.

Different explanations for why inequality has increased have different implications for various ideas of ‘fairness’ or ‘justice’

Studies have examined whether increases in income inequality reflect:

- Higher volatility in people’s incomes from year to year.
- Or increases in ‘permanent inequality’ between people who are always poor and always rich (i.e. reductions in social mobility).
How much can government affect inequality?

Tax and state benefit system clearly makes a difference.

But can be very costly to just rely on fiscal redistribution.

Countries with low inequality (e.g. Scandinavia) tend to have low ‘pre tax and benefit’ inequality; much of recent rise in inequality due to rise in pre-tax earnings inequality.

Income distribution shaped by the distribution of private incomes earned in the labour market.
How much can government affect labour market outcomes?

 Depends what drives it!

 But ultimately, people can not earn a lot in the labour market unless they have skills that employers value.

 It is not surprising that the most equal societies are different to the most unequal ones from the bottom up, e.g. early educational achievements, health, etc.

 It seems very difficult to only target equality in specific things (e.g. ‘income’), because everything is connected!