



#### 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



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#### Top of income distribution races away



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### The Gini: international comparisons



Gini – Mid 80s Gini - Mid 2000s

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



#### Real earnings growth





France (2000-2005)

210 220 230 2k 250 260 210 280 290

3.0

2.5

2.0

1.5

1.0

0.5

0.0

-0.5

-1.0

earnings growth

Avg annual



Source: OECD Notes: Full-time male workers only



#### 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)





Income



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

### 

Lowest

Income

Highest \_\_\_\_\_

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

# 

Lowest

Income







Increasing inequality could be caused by:





Or increasing inequality *between* groups

### 

Lowest

Income



Or increasing inequality *between* groups





Or increasing inequality *between* groups

(ii) because more people join a group with high inequality = "Population change (within)" effect

## 

Lowest

Income



Or increasing inequality *between* groups

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

= "Population change (mean)" effect

Lowest

Income



### 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

Period	Change in overall inequality (I <sub>0</sub> )	Within- group inequality	Between-group inequality		
			Population change (within)	Population change (mean)	Relative income
1978 - 84	18	13	0	1	4
1984 – 88	42	34	0	2	5
1988 – 91	18	16	Mostly within group inequality 1980s		1
1991 – 95-96	-12	–13			-2
1995-96 – 2000-01	11	10			-2
2000-01 - 04-05	-9	-10	1	1	-2
2004-05 - 06-07	10	10	1	1	-2



Suppose we have the following change:

# 

Lowest

Income



Gender subgroup decomposition....

... would partly attribute it to decreasing female income

### 

Lowest

Income



Colour subgroup decomposition....

... would partly attribute to decreasing yellow income

### 

Lowest

Income



Which factor is more important?

# 

Lowest

Income



Which factor is more important?

Factor decomposition allows us to consider all factors simultaneously

### 

Lowest

Income



### Income inequality – factor decomposition



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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!

