Public economics: inequality and poverty

Agnes Norris Keiller

agnes_nk@ifs.org.uk
Average income at an all-time high...

Source: Authors calculations using the Family Expenditure Survey and Family Resources Survey, various years.
... but inequality a prominent concern

“we need to act to address the deeply felt sense of economic inequality that has emerged in recent years”
Theresa May at Davos World Economic Forum, January 2017

“we need to rebuild the economy so that no one and no community is left behind”
Jeremy Corbyn at Labour regional economic conference, February 2017

“Our economic model is broken... the gap between the richest and poorest parts of the country is significant and destabilising”
Justin Welby writing in the Financial Times, September 2017
Inequality debate: what economists bring

i. Measurement
Understand merits of different measures

ii. Causes
Identify mechanisms that have driven changes in inequality and poverty

iii. Responses
Contribute to debates about appropriate policy objectives
Assess policy effectiveness
This presentation

i. **Inequality**

Measures

Trends and causes

ii. **Poverty**

Measures

Trends and causes

iii. **Responses (time permitting)**

Policy levers: tax credits and minimum wages
Inequality
Inequality of what?

Opportunity or outcomes?

Lecture will focus on outcomes

Inequality of outcomes can feed through to inequality of opportunity

• For example through early child development and health (Conti 2013)
Inequality of what?

Outcome of interest is welfare
... but measuring this is clearly challenging.

**Most feasible approach uses annual income:**
Net of taxes and transfers
Measured at the household level (assumes income sharing)
Adjusted for household composition (equivalisation)

**Lifecycle economic model highlights important caveats:**

Income ≠ consumption
  • Implies consumption a better indicator of welfare but measurement remains challenging

Annual income ≠ lifetime income
  • Implies annual income inequality may differ from permanent income inequality (more on this later)
# What measure of inequality?

<table>
<thead>
<tr>
<th>Measure</th>
<th>😊</th>
<th>😞</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentile ratios</td>
<td>- Easily interpretable</td>
<td>- Cannot be decomposed</td>
</tr>
<tr>
<td></td>
<td>- Insensitive to extremes (which may be driven by measurement</td>
<td>- Insensitive to extremes</td>
</tr>
<tr>
<td></td>
<td>error)</td>
<td>- Does not satisfy “Pigou-Dalton Transfer sensitivity”</td>
</tr>
<tr>
<td>e.g. 90:10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>- Captures changes across the entirety of the income distribution</td>
<td>- Cannot be (additively) decomposed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Sensitive to extremes</td>
</tr>
<tr>
<td>Top 1% Share</td>
<td>- Easily interpretable</td>
<td>- Cannot be decomposed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- V sensitive to extremes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Does not satisfy “Pigou-Dalton Transfer sensitivity”</td>
</tr>
<tr>
<td>G-E measures</td>
<td>- Captures changes across the entirety of the income distribution</td>
<td>- Sensitive to extremes – (GE0 sensitive to bottom of distribution,</td>
</tr>
<tr>
<td>e.g. GE0 a.k.a mean log</td>
<td>- Can be additively decomposed</td>
<td>GE2 sensitive to top)</td>
</tr>
<tr>
<td>deviation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Public economics: inequality and poverty
## British income inequality: higher or lower?

<table>
<thead>
<tr>
<th>Period</th>
<th>90:10 ratio</th>
<th>Gini</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3.9</td>
<td>0.35</td>
</tr>
<tr>
<td>1995</td>
<td>4.1</td>
<td>0.33</td>
</tr>
<tr>
<td>1965</td>
<td>3.1</td>
<td>0.25</td>
</tr>
</tbody>
</table>
British income inequality: the last 50 years

Note: Incomes have been measured net of taxes and benefits but before housing costs have been deducted. Years refer to calendar years up to and including 1992 and to financial years from 1993–94 onwards. Source: Figure 3.6 of Cribb et al. (2017)
British income inequality: the last 50 years

Note: Incomes have been measured net of taxes and benefits but before housing costs have been deducted. Years refer to calendar years up to and including 1992 and to financial years from 1993–94 onwards. Source: Figure 3.7 of Cribb et al. (2017)
What caused the 1980s surge?

Key driver was increase in returns to skill (education) as rising demand for skilled workers in the 1980s outstripped supply (Goldin & Katz 2007)

Large reductions in top income tax rates also contributed (Adam & Browne 2010)

Why has the 90:10 fallen over the last 20 years?

Tax and benefit reforms (increased incomes of pensioners and non-workers)

Labour market trends of falling worklessness and poor earnings growth

Why has the top 1% continued to rise?

High remuneration in Financial sector (Bell & Van Reenen 2014)

Income from investments and rising stock markets (Brewer et al. 2008)
Lifetime income inequality: methods

Various ways of overcoming measurement problem

i. Simulation approach:
e.g. Levell et al. (2017)

ii. Consumption data:
e.g. Blundell & Preston (1998)

iii. Measure lifetime income:
e.g. Guvenen et al. (2017)
Lifetime income inequality: findings

**Levell et al. (2017):**

Lifetime income inequality substantially lower than single-year inequality

Indicates a lot of inequality is temporary and reflects:

i. The stage of an individual life (e.g. differences in family structure)

ii. Transitory shocks (e.g. spells of unemployment)

**Blundell & Preston (1998):**

Not all of 1980s inequality surge was due to a rise in permanent inequality

But permanent income inequality did rise as a result of:

i. An aging population

ii. Younger cohorts experiencing greater levels of permanent income inequality than older cohorts at a given age
Inequality trends and determinants: summary

Defining feature of last 5 decades is 1980s inequality surge
Largely due to impact of changing returns to skills on earnings inequality

More recent trends differ between measures
Difference driven by increase in top 1% share

Lifetime income inequality
Research suggests different to snapshot inequality in terms of both levels (lower) and trends (increased in the 1980s but by less than snapshot)
Poverty
How to measure poverty?

**Ideal measure reflects prevalence of very low welfare**

Low welfare can have many causes e.g. social isolation, familial instability, health

But measurement of these is an issue

**Standard approach**

Focuses on material living standards

Define a threshold below which income is insufficient to achieve “adequate” standard of living (a “poverty line”)

**Absolute poverty:**

Poverty line defined as a fixed level of real income

Current UK definition = 60% of 2010/11 median income

**Relative poverty:**

Poverty line defined as a fraction of average income

Current UK definition = 60% of median income
How to measure poverty?

Absolute v. Relative:

Absolute poverty lines become irrelevant over time as society’s perception of what is an “adequate” standard of living changes.

Relative poverty less appropriate for tracking year-to-year changes in poverty (particularly when average income is falling).

Tend to use absolute poverty to examine short-run trends and relative poverty to examine long-run trends.
How to measure poverty?

What about housing costs?

Housing is a necessity that is relatively hard to adjust

Focus on income after housing costs are deducted (AHC income) rather than before housing costs are deducted (BHC income)

AHC income closer to disposable income a household can use to maintain living standards

What about duration of poverty?

Relevant if welfare consequences of low income are greater when low income is sustained over several years

“ Persistent poverty” defined as being in poverty for several years over a certain period (more on this later)
Poverty in Britain: the last 50 years

Note: Years refer to calendar years up to and including 1992 and to financial years from 1993–94 onwards.
Source: Figure 4.5 of Cribb et al. (2017)
Poverty in Britain: the last 50 years

Relative poverty rate (AHC) since 1961 (GB)

Note: Years refer to calendar years up to and including 1992 and to financial years from 1993–94 onwards.

Source: Figure 4.8 of Cribb et al. (2017)
Persistent v. snapshot: poverty rates

Defined as being in (absolute BHC poverty) for at least 3 of the last 4 years

![Graph showing poverty rates](image)

Source: Figure 4.9 of Cribb et al. (2017)
Poverty trends and determinants: summary

Poverty substantially higher than 5 decades ago as large increase in 1980s yet to be fully unwound

Increase in the 80s linked to surge in inequality

Those in poverty today are:

• far less likely to be pensioners than in previous decades
• and far more likely to be children or adults in working households

Trends driven by welfare reforms and declining worklessness combined with poor earnings growth

Persistent poverty considerably lower than snapshot poverty

Indicates very low income is short-lived for many
The policy debate
Contributing to the debate: policy levers

Prominent policies aimed at changing the income distribution:

i. Fiscal redistribution e.g. Tax credits
Contributing to the debate: policy levers

Tax credits:
Focus on reducing poverty rather than tackling inequality

“Our historic aim will be for ours to be the first generation to end child poverty”
Tax credits:
Focus on reducing poverty rather than tackling inequality
Resulted in large increases in welfare spending targeted at families with children
Contributing to the debate: policy levers

Tax credits:

Source: Author’s calculations using the Family Resources Survey, various years.
Contributing to the debate: policy levers

**Tax credits:**

Focus on reducing poverty rather than tackling inequality

Resulted in large increases in welfare spending targeted at families with children

Drove steep reductions in absolute child poverty

Increased financial work incentives for lone parents

But reduced them for many potential second earners

Came at a large cost to the exchequer (accounted for 13% of GB welfare spending in 2015-16)
Contributing to the debate: policy levers

Prominent policies aimed at changing the income distribution:

i. Fiscal redistribution e.g. Tax credits

ii. Wage regulation e.g. National Minimum Wage
National Minimum Wage:

“National Living Wage” rebrand legislates substantial rises in wage floor; Labour has proposed an even higher rate

National Minimum Wage:

“National Living Wage” rebrand legislates substantial rises in wage floor; Labour has proposed an even higher rate

Substantial evidence that UK minimum wage has boosted worker pay (e.g. Dolton et al. 2011; Metcalf 2008)

Biggest gains accrue to middle-income households as:

- many minimum wage workers are second earners
- lowest-income households often contain no one in work
- low-income working households often lose means-tested benefits as pay rises

Little evidence to date of any adverse employment effects but past research has limited external validity given magnitude of current proposals
Policy levers: summary

Policy levers:

Tax credits contributed to large reductions in child poverty

• partly by increasing financial work incentives
• but disincentivised work for some and come at a large cost to the exchequer

Minimum wages do boost pay

• but biggest gains accrue to middle-income households rather than those on lowest incomes
• possible that large rises in future may have adverse consequences


Data acknowledgements:

