Getting the measure of inequality

Has income inequality in the UK been stable for the last 30 years?

Stephen P. Jenkins
Email: s.jenkins@lse.ac.uk

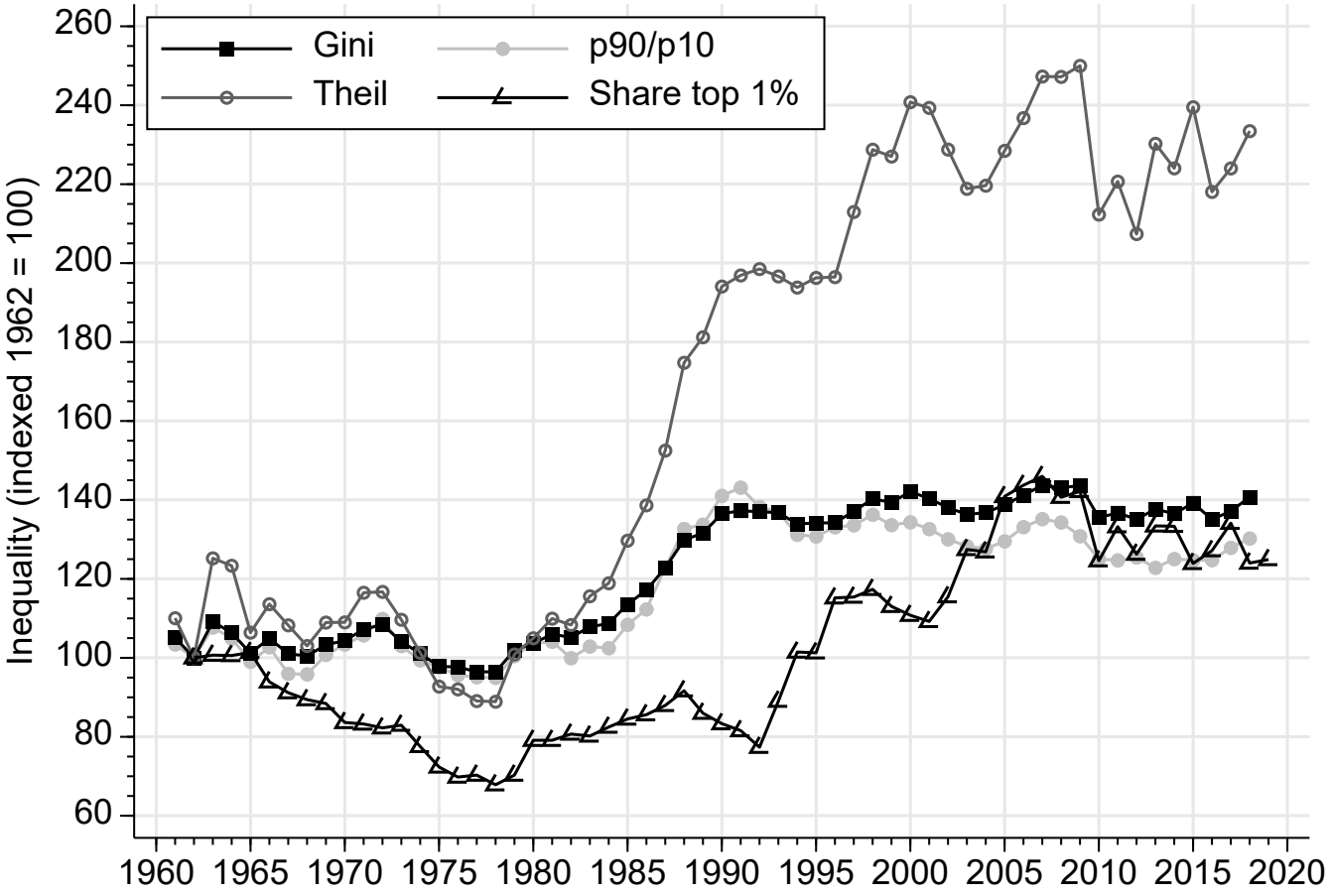
LSE

Inequality
The IFS Deaton Review

Overview and outline

- Let us salute Bourquin, Brewer, and Wernham (2022)!
  - Thorough and comprehensive description of what has been happening to the UK income distribution over the last half century or more, and the factors underlying these trends – a landmark reference
- Rather than trying to engage with the large number of findings they present, my commentary focuses on discussion of one of the most commonly cited 'facts' about UK income inequality – that it has changed little over the last 30 years (BBW slide #2)
  - SPJ: There are some grounds for arguing that income inequality levels are higher – and the inequality increase over time greater – than conventional approaches indicate
- To do this, I look at several fundamental issues in inequality measurement:
  - Inequality concepts, e.g., inequality aversion, relative versus absolute inequality, and inequality of opportunity versus inequality of outcome,
  - Definitions of 'income', the income-receiving unit, and the reference period, and
  - Related data issues
  - This is what I mean by "getting the measure of inequality"

Inequality trends depend on the inequality index



The chart raises additional issues

Focusing on the top 1% share (based on HMRC's 'SPI' income data) raises additional questions:

1. Is the 'stable inequality trends' result due to problems with the survey data (FRS and LCFS)?
   - Specifically, surveys do not cover top-incomes particularly well ... and so …
   - What happens to inequality trends if you adjust for these top-income under-coverage problems using data from the SPI?
2. Is the 'stable inequality trends' result due to using different definitions of 'income' and income-receiving unit?

LSE

Is the 'stable inequality trends' result due to top-income under-coverage problems?

- Burkhauser, Hérault, Jenkins, and Wilkins ('BHJW'): critique of adjustments made by DWP when preparing HBAI data and reports (and Gini series), since 1992
  - 'SPI-adjustment': ~ ½% of top incomes replaced by cell-mean values from SPI data (after first aligning FRS and SPI data and definitions)

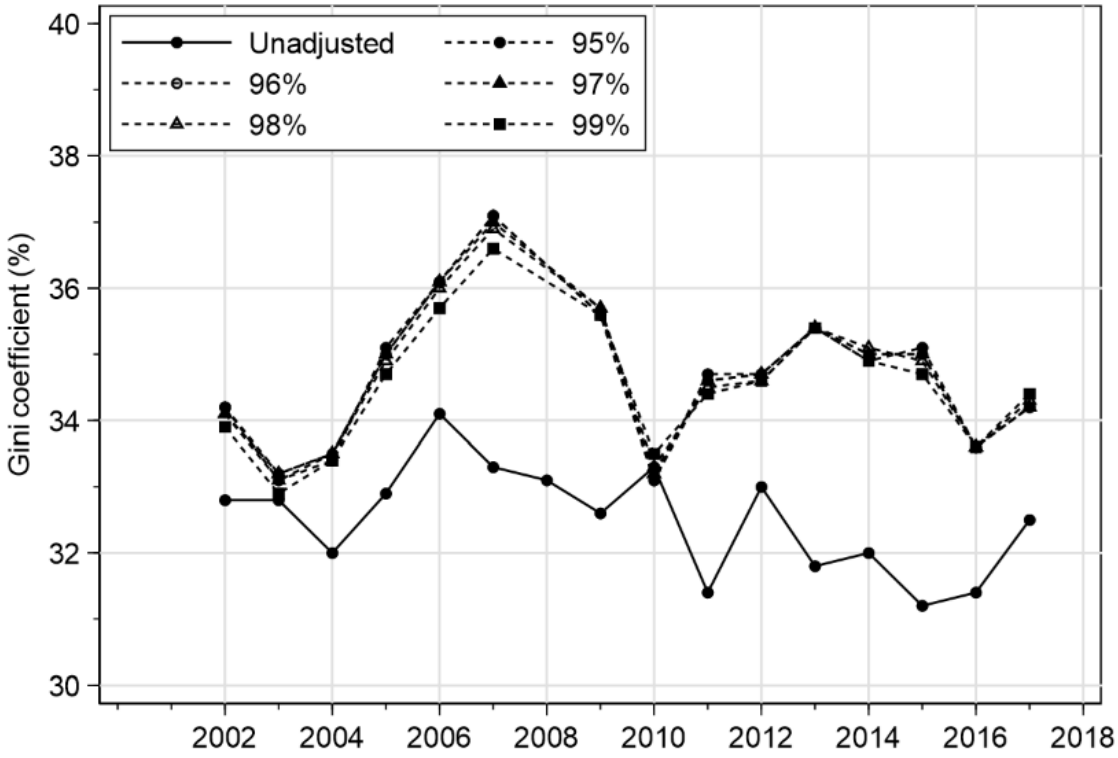
1. Need to adjust more: 3%–5%
2. Need to take better account of inequality at the top: more granular approach
3. Separate adjustments by country and by whether of pension age are unnecessary
4. Using previous year's SPI data could be problematic

- BHJW articles in FS 2018 and OEP 2018 provide critique, and propose and illustrate an 'SPI2' adjustment
- BHJW work lies behind the recent ONS introduction of its own 'SPI' adjustment into its official inequality series (based on LCFS, not FRS)

LSE

ONS's top-income adjustment affects levels and trends of the Gini

- **Figure·2.·Gini·coefficient·series·without·top-income·undercoverage·adjustment·and·with·SPI-based·adjustments·above·multiple·thresholds·¶**



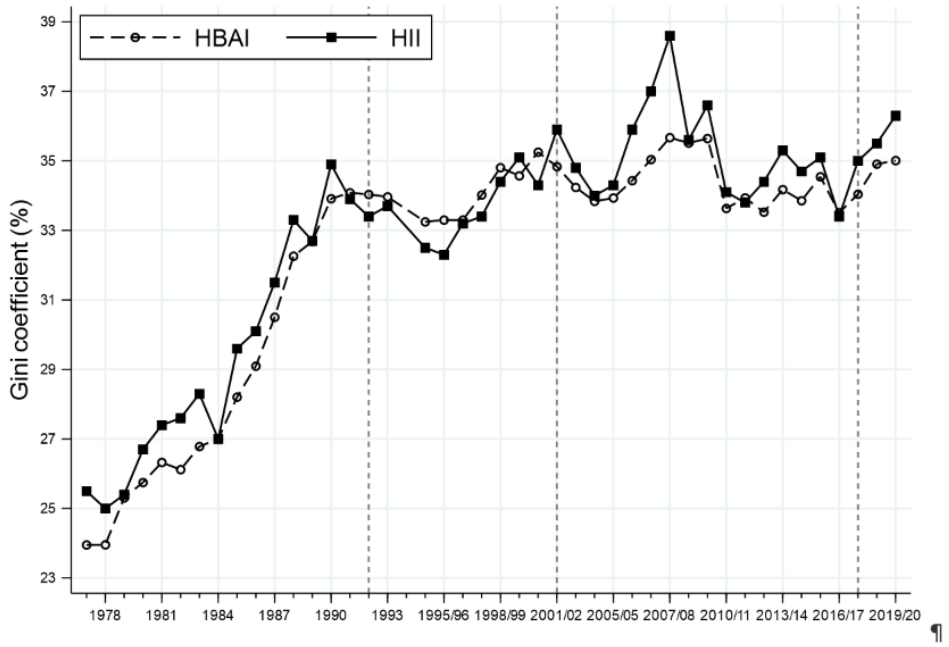
¶

Note:·Based·on·data·from·the·LCFS·and·the·SPI.·Income·is·equivalised·net·household·income.·Years·refer·to·financial·years·('2002'·denotes·2002–03,·etc.).·The·solid·line·is·the·Gini·estimate·without·any·adjustment·for·top-income·undercoverage.·The·dotted·lines·show·Gini·estimates·calculated·using·SPI-based·imputations·for·incomes·above·different·percentile·thresholds;·estimates·for·2008·are·missing·as·no·SPI·dataset·is·available·for·that·year.¶

Source:·Office·for·National·Statistics·(2019,·figure·3),·redrawn·by·the·author.¶

ONS's top-income adjustment (now back to 2001/02) is more extensive than DWP's and yields different inequality levels and trends

▪ **Figure·3.·Gini·coefficient·series:·ONS·'HII'·and·DWP·'HBAI'·estimates¶**

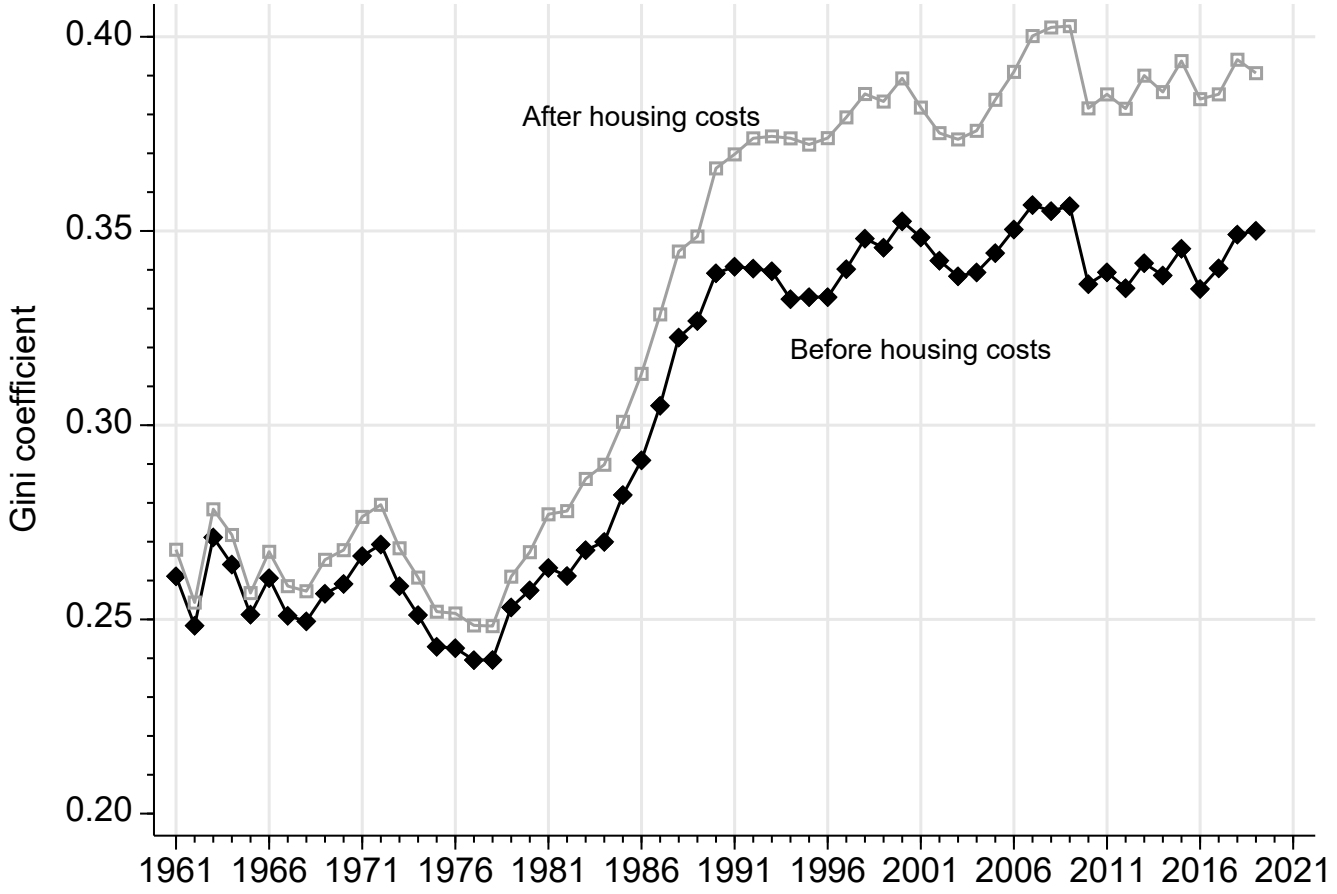


¶

Note:·All·distributions·refer·to·distributions·of·net·household·income,·equivalised·using·the·modified·OECD·scale.·The·individual·is·the·unit·of·analysis,·with·estimates·based·on·the·full·private·household·population.·The·HBAI·estimates·are·the·same·as·published·by·the·DWP·and·are·based·on·the·FRS·(and·the·Family·Expenditure·Survey·before·1994–95).·Northern·Ireland·data·included·from·2002–03·onwards.·The·HBAI·series·uses·the·SPI-adjustment·method·from·1992·onwards.·Up·to·2016–17,·the·HII·series·is·based·on·data·from·the·LCFS·and·its·predecessors;·the·estimates·for·2017–18·onwards·are·based·on·Household·Finances·Survey·data·(which·extend·the·LCFS).·The·HII·series·incorporates·a·top-income·adjustment·for·years·2001–02·and·thereafter·based·on·the·ONS's·'quantile'·method·employing·a·97%·threshold·and·0.5%·quantile·band·width.·The·vertical·dashed·lines·indicate·the·survey·years·for·which·the·DWP·and·the·ONS·first·used·their·top-income·adjustments·and·the·year·the·ONS·switched·to·using·Household·Finances·Survey·data.¶

Source:·Jenkins·(2022,·figure·4),·using·data·in·spreadsheets·accompanying·Office·for·National·Statistics·(2021a,·2021b)·for·the·HII·series·and·Cribb·et·al.·(2021)·for·the·HBAI·series.·¶

Using an AHC income definition (rather than BHC) mostly affects inequality levels rather than trends

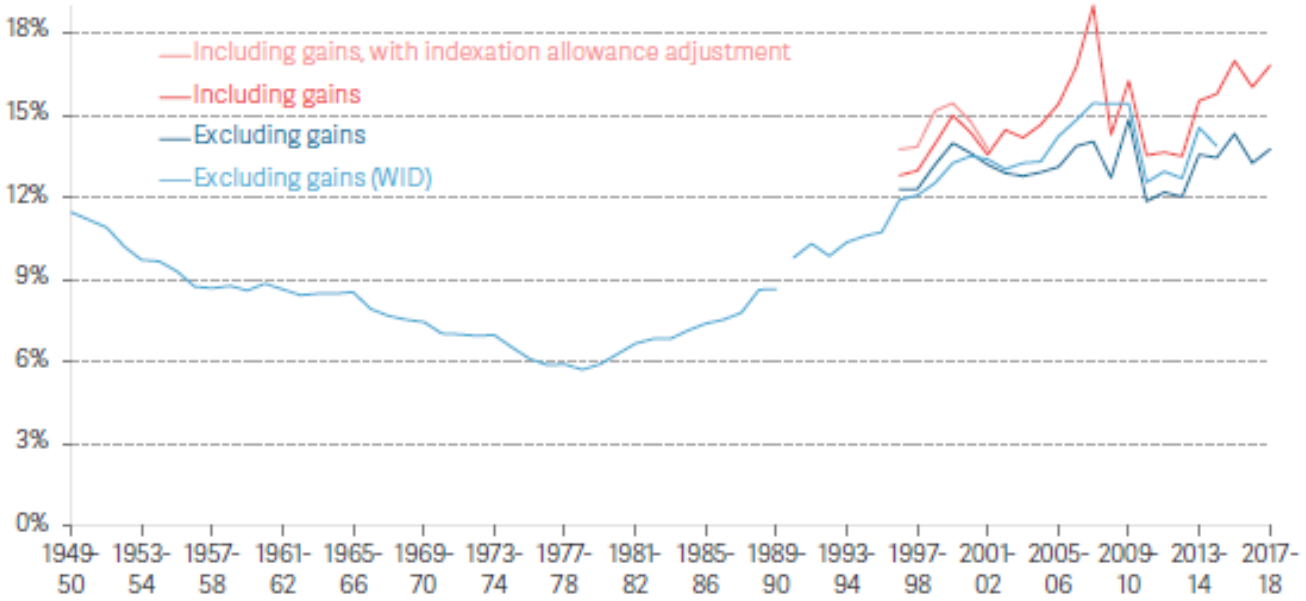


Source: updated version of Jenkins (2015), 'The income distribution in the UK: a picture of advantage and disadvantage', in: Dean and Platt (eds.), *Social Advantage and Disadvantage*, OUP.

Including realised Capital Gains in income raises top-income shares and different trend

FIGURE 17: **It is probable that the top 1 per cent's share of income including capital gains in 2017-18 was the third highest since at least World War Two**

Top 1 per cent's share of taxable income



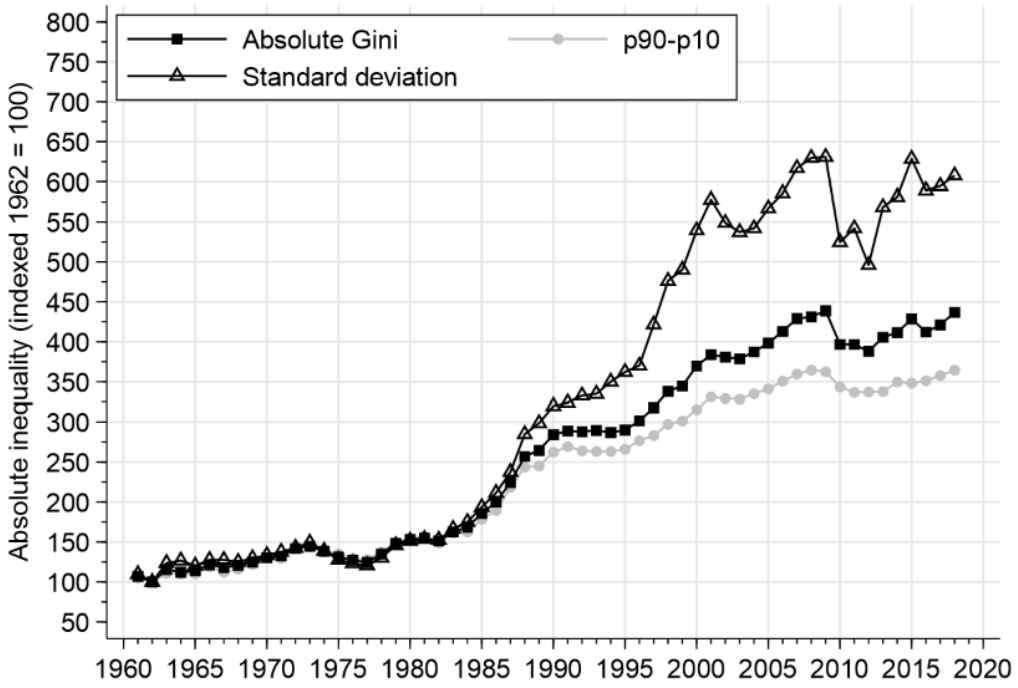
NOTES: Unit of analysis changes in 1990, from married couples (where applicable) to individuals. Prior to 2008-09, the red series is affected by indexation allowance. In the pink series, an estimated adjustment is made to remove this to give total nominal gains. The impact of taper relief is removed in both series. Income shares excluding capital gains differ slightly from the World Inequality Database (WID) data, for reasons explained in CAGE Working Paper 465.
SOURCE: A Advani & A Summers, Capital Gains and UK Inequality, CAGE Working Paper 465, May 2020 (Calculations based on HMRC administrative datasets); World Inequality Database.

Source: Corlett, A., Advani, A., and Summers, A. (2020). *Who gains? The importance of accounting for capital gains*. London: Resolution Foundation. Note: inequality is based on income tax data and income tax records with individual as income recipient (not household)

Income inequality is continuing to rise if you use an 'absolute' inequality measure

- Absolute measures are based on raw income gaps, not gaps expressed relative to the mean (as with the usual Gini)

▪ Figure 5. Trends in UK income inequality since 1961, by absolute inequality measure



Note: The indices summarise absolute inequality in distributions among individuals of equivalised household net income before the deduction of housing costs (using the same definitions as employed by the HBAI statistics of the Department for Work and Pensions, 2020), derived from the FRS (source: Institute for Fiscal Studies, 2020). Years are fiscal years from 1994–95 ('1994') onwards. The absolute Gini is the standard Gini coefficient multiplied by mean income.

Summary & Conclusions

- UK income inequality levels are higher than conventionally assumed
- The conclusion that income inequality in the UK has been 'stable' over the last 30 years is sensitive to the choice of inequality index employed or inequality conceptualisation
  - Using a more top-sensitive inequality index than the Gini coefficient, or an absolute index rather than relative index, you are more likely to conclude that income inequality has definitely risen over the three decades
- Parting question: are ongoing expressions of concern about income inequality due to worries about (i) rising levels of inequality, or (ii) the corrosive effect of inequality remaining at a (relatively stable) high level?

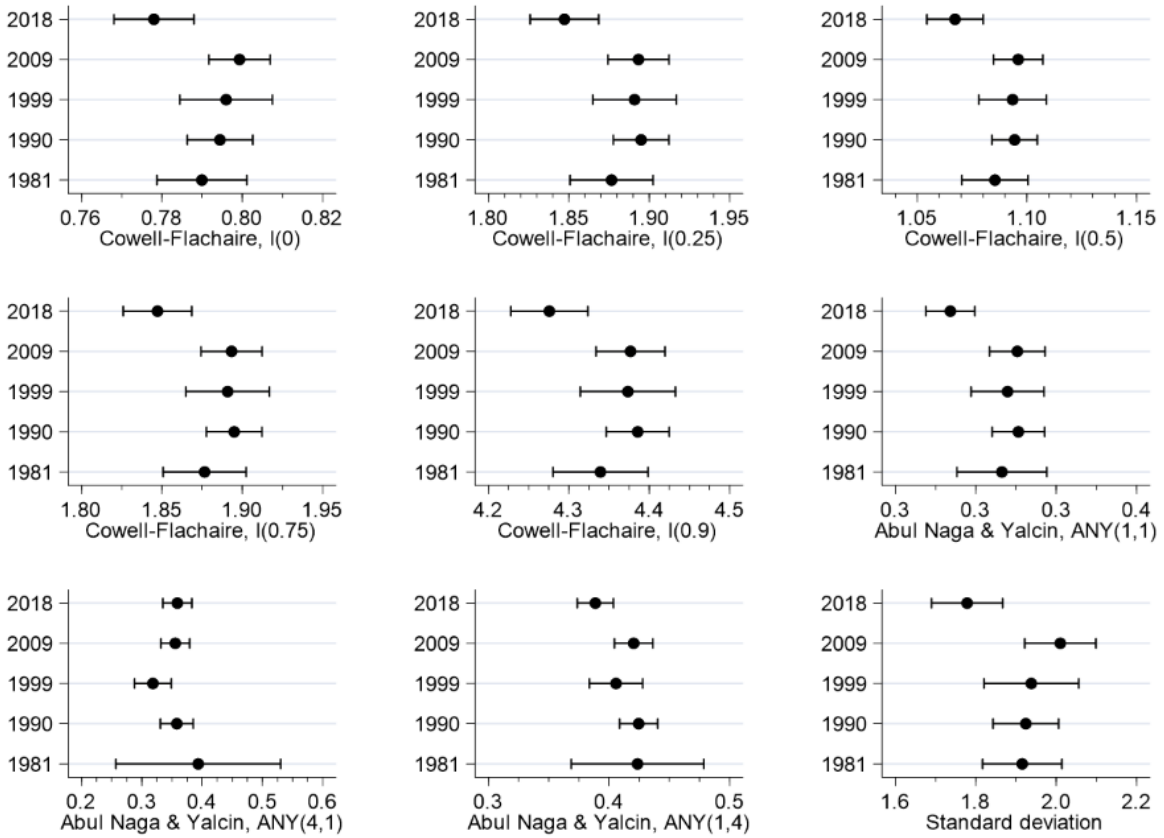
LSE

Other issues in my Commentary

- Lack of income mobility – is there increasingly less turnover at the top? Or at the bottom?
- More generally, are there rising inequalities of opportunity (rather than inequality of outcome)?
- What about inequalities of subjective well-being, and their trend?

Life satisfaction inequality may have *fallen* over the last decade

▪ **Figure·6.·Life·satisfaction·inequality,·GB,·1981–2018,·by·inequality·index¶**



¶

Note:·Author's·derivation·from·weighted·data·of·the·European·Values·Survey.·The·inequality·indices·are·explained·by·Jenkins·(2020).·Life·satisfaction·is·measured·on·a·10-point·scale·ranging·from·1·(dissatisfied)·to·10·(satisfied).·Panels·show·estimates·plus·95%·confidence·intervals·(derived·using·bootstrapped·standard·errors·with·500·replications).¶