Developing Indicators of Shared Prosperity and Poverty Consistent with National Accounts

Richard Tonkin et al.

- Based on work of OECD-Eurostat Expert Group on Disparities within a SNA framework (most recent report: 2017)
- Justification for SNA approach
  - Aids international comparability
  - Possibility of distributional indicators consistent with economy-wide totals for coherence for users of statistics
  - Regularly of national accounts
  - Timeliness compared to household survey estimates
- This study, methods applied to the UK
  - Microdata: Living Costs and Food Survey with about 5,500 household/year

Overview of This Study

- Methods
  - Microdata coverage
  - Imputation and scaling
  - Adjusted microdata
    - Corrected for social security benefit under-reporting (and reasons)
    - Corrected for top income under-reporting (and reasons)
    - Not resident in UK adjustment
    - *Impact of adjustments*
  - Addressed micro and macro conceptual differences - purpose
- Produced NA based measures of shared prosperity (inequality and growth)
- Development of timely indicators
- Conclusions and next steps

Figure 1. A step-by-step approach for the estimation of distributional information

Step 1 – Adjust national accounts totals

Step 2 – Determine relevant variables from micro data sources in relation to the national accounts variables

Step 3 – Impute for missing elements and scale the micro data to the adjusted national accounts totals

Step 4 – Clustering households

Step 5 – Derive relevant indicators for the household groups

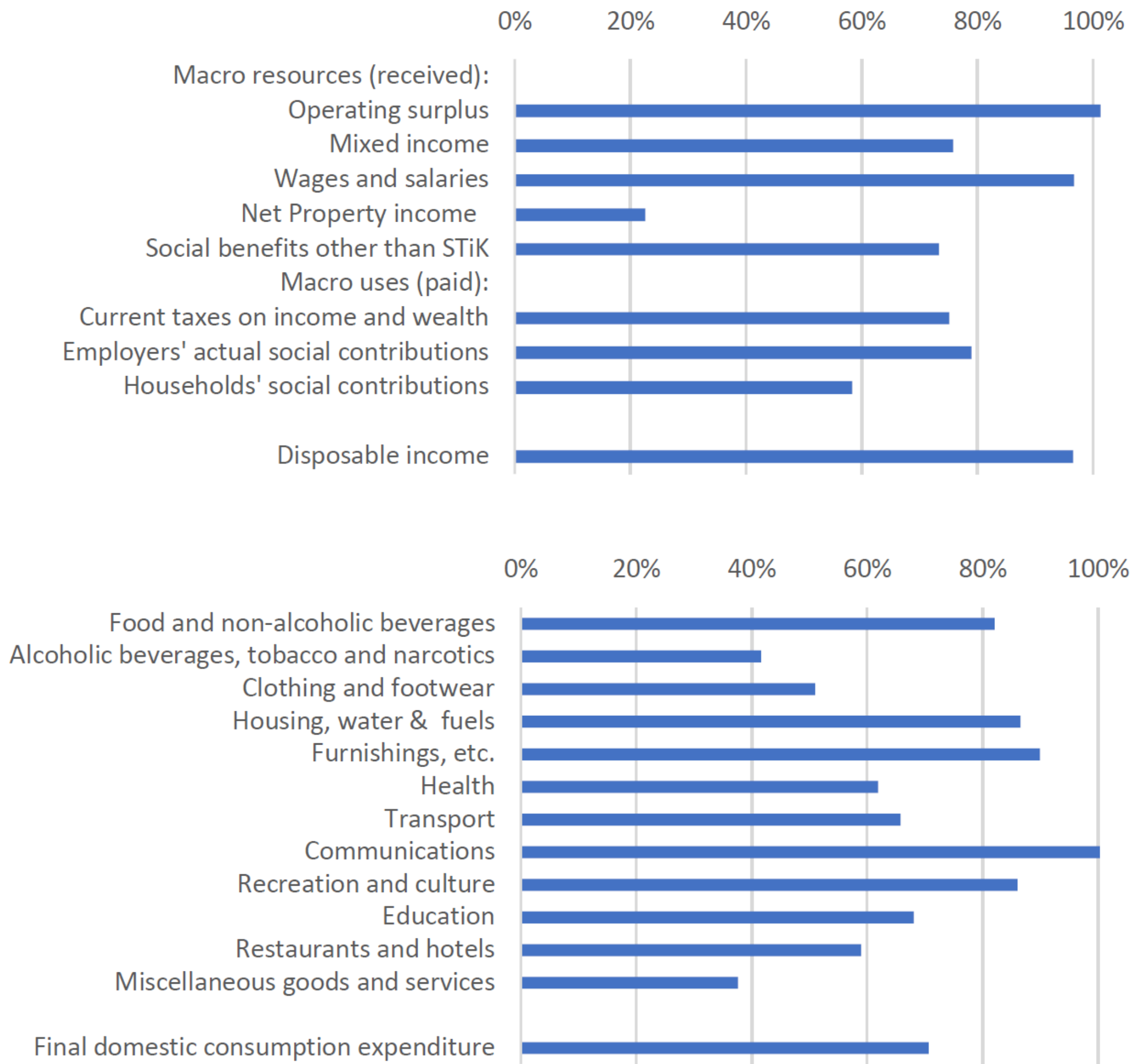
Source: Zwijnenburg et al., OECD 2017

Same population

Map relevant variables- same concepts

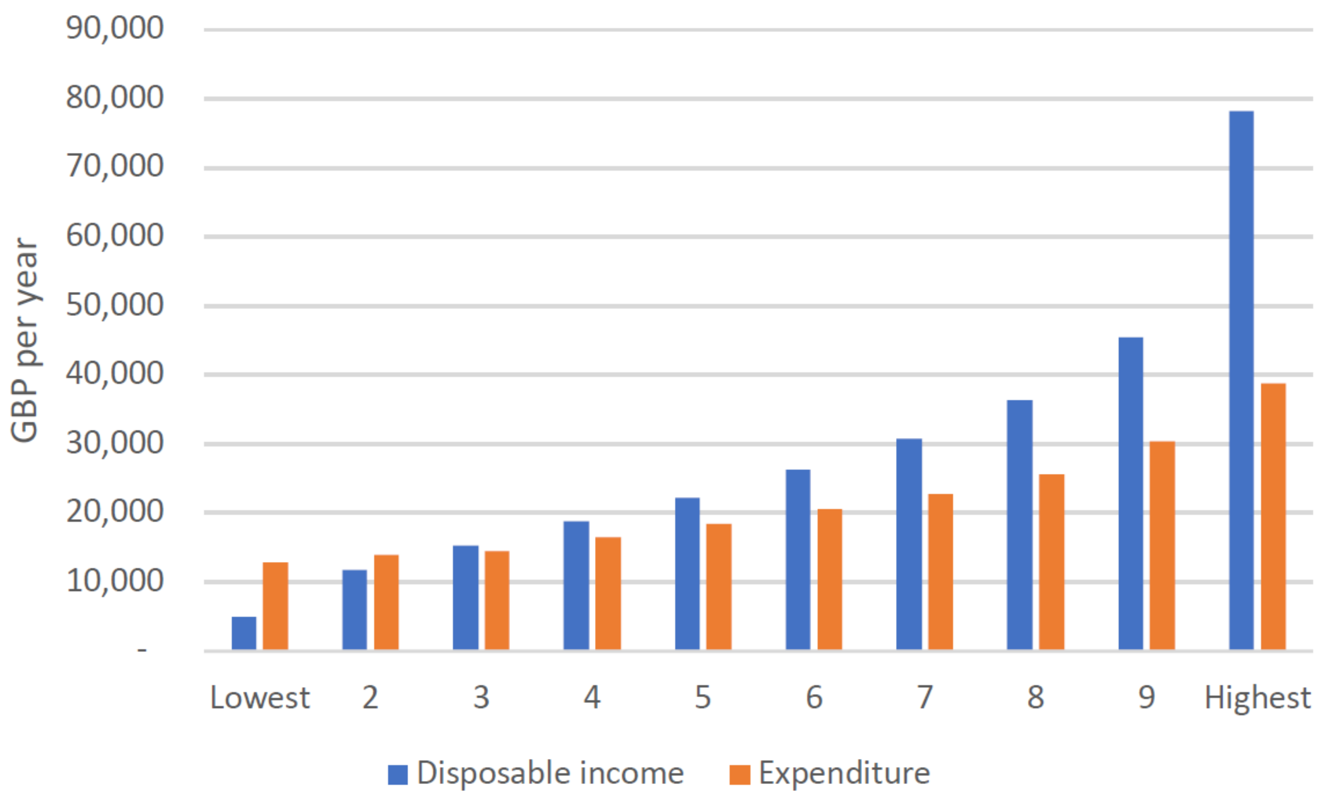
Bridge gaps with imputation and scaling micro to NA

Figure 1: Coverage of survey-based estimates of National Accounts aggregates, UK, 2017



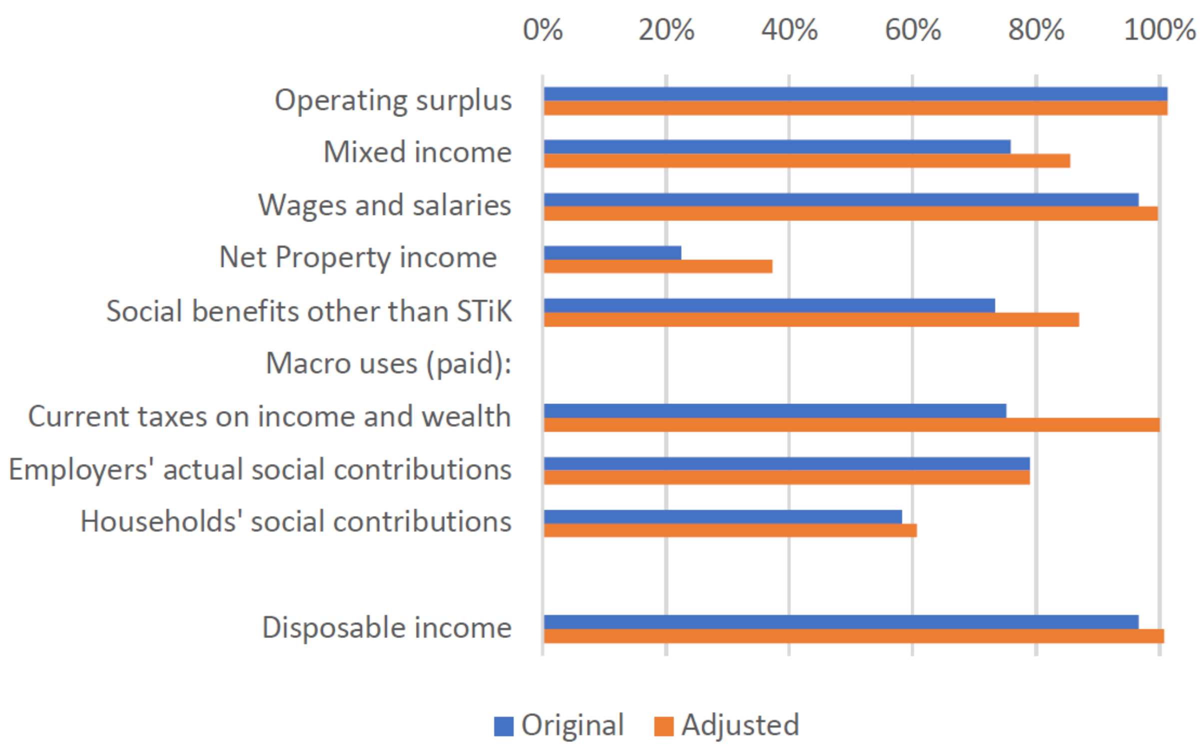
Source: Office for National Statistics- Living Costs & Food Survey & National Accounts Blue Book, 2018

Figure 2: Mean disposable income and expenditure by equivalised disposable income decile, UK, 2016/17



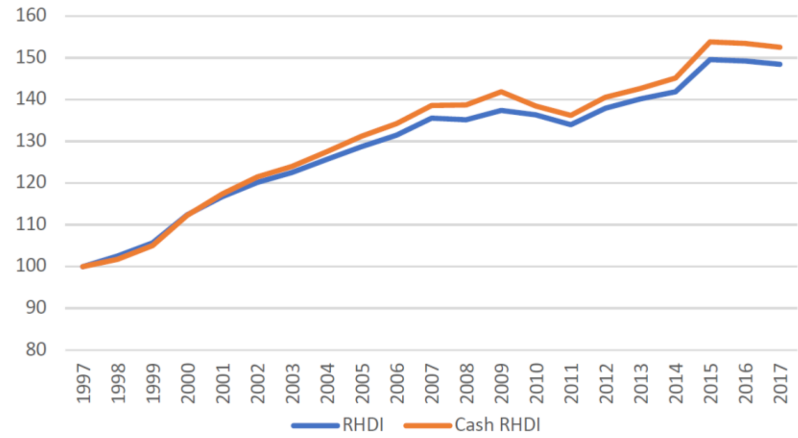
Source: Office for National Statistics- Living Costs & Food Survey

Figure 7: Coverage of survey-based estimates of National Accounts aggregates, 2017, UK



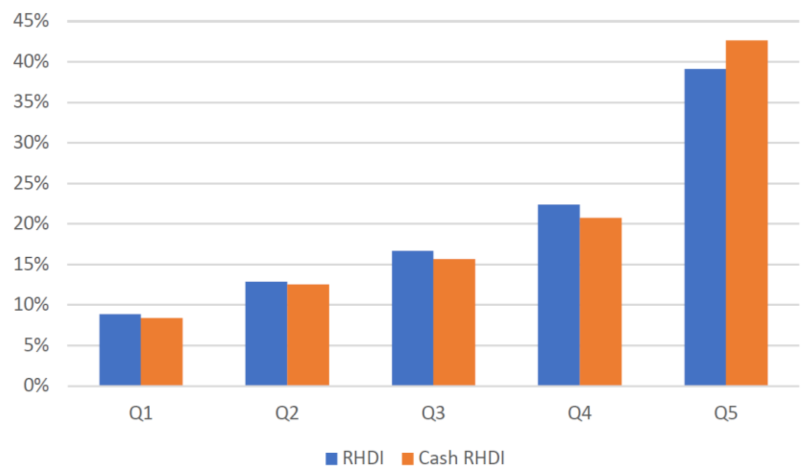
Source: Office for National Statistics- Living Costs & Food Survey & National Accounts Blue Book, 2018

Figure 8: Growth in Real Household Disposable Income (RHDI) & cash-basis RHDI, 1997-2017, UK (index 1997=100)



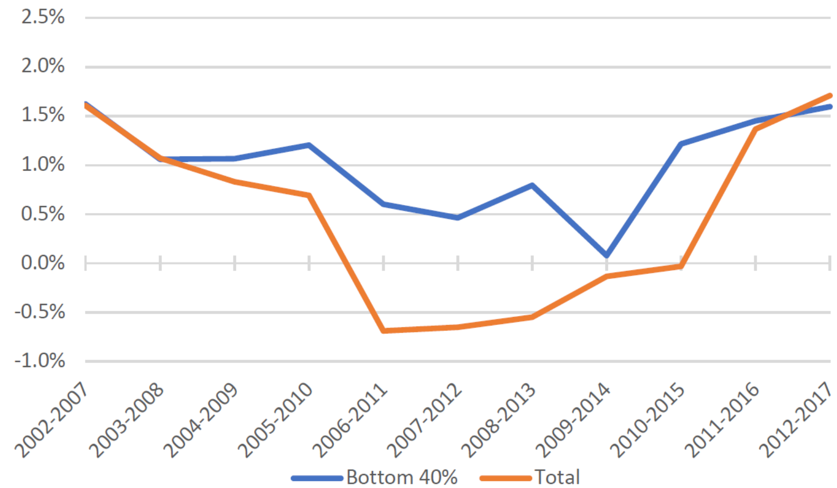
Source: Office for National Statistics- National Accounts Blue Book, 2018

Figure 9: Share of RHDI & cash-basis RHDI by equivalised disposable income quintile, 2017, UK



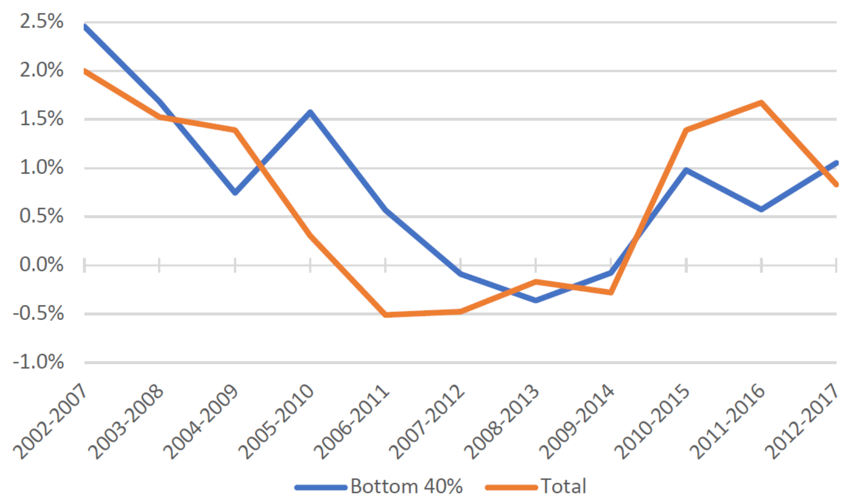
Source: Office for National Statistics- Living Costs & Food Survey; National Accounts Blue Book, 2018

Figure 10: Average annual growth rates of disposable income per capita among the bottom 40% of the population and total population – survey-based measures, 2002-07 to 2012-17, UK



Source: Office for National Statistics- Living Costs & Food Survey

Figure 11: Average annual growth rates of disposable income per capita among the bottom 40% of the population and total population – national accounts-based measures, 2002-07 to 2012-17, UK



Source: Office for National Statistics- Living Costs & Food Survey; National Accounts Blue Book, 2018

Comments/Questions

- How timely are the Living Costs and Food Survey data?
- Details on adjustments (e.g., Corlett et al. 2018, Shine et al 2019, Aitken and Weale 2018)
  - Example provided: allocate benefits based on eligibility
- Liked very much the “addressing conceptual differences” section
  - Most relevant for distributional analyses
- Focus in this study: distributions of income by quintiles
- Development of timely indicators: flash estimates or “nowcasts”
  - Based on microsimulation
  - How well do these match household survey data once available?

Comments/Suggestions

- Using NA in this way, complement not substitute for household micro data analysis
- Advantages of NA framework
  - Coherence
  - Comparability
  - Frequency
- Challenges
  - Reconciliation of micro and macro
  - Updated information about distribution of the population
- ***What I would like to see***
  - *Analysis of poverty (in the title but little to nothing about this in the paper)*
  - *Production of distributional accounts using Consumption Expenditures*
  - *Updated comparisons to other countries (income and consumption)*

Some other references

- Passero, Willam, Thesia I. Garner, and Clinton McCully. "Understanding the Relationship: CE Survey and PCE," *Improving Measurement of Consumer Expenditures* (eds. Christopher Carroll, Thomas Crossley, and John Sabelhaus), University of Chicago Press, National Bureau of Economic Research in NBER Book Series Studies in Income and Wealth, May 2015, pp. 181 – 203.

- Garner, Thesia and Kathleen S. Short, "Accounting for Owner-occupied Dwelling Services: Aggregates and Distributions," *Journal of Housing Economics*, Volume 18, Issue 3, September 2009, pp. 233-248.