Understanding Society User Support - Support #1967

Derived OECD equivalence scale variable which matches scale used to calculate relative poverty

09/05/2023 11:47 PM - Thomas Stephens

Status:	Resolved		**Start date:**	09/05/2023
Priority:	Normal		**% Done:**	100%
Assignee:				
Category:	Data documentation			

Description

Good afternoon,

Apologies but I have a (hopefully quick) query. I notice that the OECD equivalence scale variable in Understanding Society (ieqmoecd_dv) does not use the same scale as that used for calculating relative poverty in Households Below Average Income (HBAI) (their scale is attached for ease of reference).[1] I am wondering if you have a derived variable which uses the HBAI equivalance scale, or if you could point me to some syntax (ideally using R) which would create one?

Just to provide some further background (and in case useful for other readers):

- I am trying to calculate the median household income in Understanding Society to create an indicator for individuals who live in households in relative poverty. Failing that, I'll use the median from another survey and simply use this as a reference point to create the indicator. To do either of these two things, I obviously need a measure of equivalised household income that matches with that used in the official definition of relative poverty.

- However, I've noticed that HBAI uses a different equivalised scale to the derived variable in Understanding Society, as the basis for their calculation of median incomes. Overall, their scale has the effect of creating a much larger median household income than you get in Understanding Society data, because the numbers are lower - with some 0.67 values (for single households) and with couples getting a "1", whereas the lowest value in ieqmoecd_dv is 1. So when net household income is divided by their scale, some incomes actually go up.

- Their scale also seems to match with the way "equivalised household income" is calculated elsewhere, at least in the ONS[2] and IFS[3]. All their studies appear to show a much higher median equivalised income than I've managed to get from Understanding Society by dividing net household income before housing costs (fihhmnnet1_dv) by your equivalence scale (ieqmoecd_dv).

Based on my analysis the distribution of (weighted) net equivalised household incomes I've been able to create using Understanding Society is encouragingly very similar to that used in HBAI and elsewhere[4], it is simply the actual values that are lower (and thus the median).

Best wishes,

Tom

REFERENCES:
[1] Sourced from p. 22 of this DWP Methodology Report,
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/691919/households-below-average-income-quality-methodology-2016-2017.pdf
[2] See
https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/householddisposableincomeandinequality/financialyearending2022#average-household-income-data
[3] https://ifs.org.uk/articles/inequality-fell-first-two-years-pandemic-middle-and-high-income-households-became-worse
[4] Particularly in Figure 5 here,
https://www.gov.uk/government/statistics/households-below-average-income-for-financial-years-ending-1995-to-2022/households-below-average-income-an-analysis-of-the-uk-income-distribution-fye-1995-to-fye-2022#about-these-statistics

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History

#1 - 09/07/2023 02:39 PM - Understanding Society User Support Team

- Category set to Data documentation

- Status changed from New to Feedback

- % Done changed from 0 to 80

- Private changed from Yes to No

Dear Tom,

We follow the methodology and procedure proposed by the OECD for their OECD-modified scale: "This scale, first proposed by Haagenars et al. (1994), assigns a value of 1 to the household head, of 0.5 to each additional adult member and of 0.3 to each child." (see https://www.oecd.org/els/soc/OECD-Note-EquivalenceScales.pdf). You can find the Stata syntax creating ieqmoecd_dv on our website: https://www.understandingsociety.ac.uk/sites/default/files/downloads/documentation/mainstage/syntax/stata/ieqmoecd_dv_public.do In case you need to match our data to other data sources using different equivalence scales, you could try to construct such an equivalence scale from scratch using other variables. For that task the ieqmoecd_dv_public.do file might be again useful as you will see the names and location of potentially useful variables.

I hope it helps.

Best wishes,
Piotr Marzec
UKHLS User Support

#2 - 11/30/2023 01:27 PM - Understanding Society User Support Team

- Status changed from Feedback to Resolved

- % Done changed from 80 to 100

Files

HBAI Equivalence Scale calculation.png	549 KB	09/05/2023	Thomas Stephens