### Questions

Does educational assortative mating contribute to household income inequality?

Do these contributions differ across countries and change over time?

So far, studies concluded that there is little association between changes in educational homogamy and income inequality (on DK, US, UK), hypotheses:

- Changes in educational homogamy not big enough
- Education not strongly related to household income

### Method

#### ‘Counterfactual’ simulations

Given country-period educational distribution what would estimated income inequality be in case of:

- minimal homogamy
- maximal homogamy

We divide households into groups $j$ according to the combined levels of education of opposite-sex couples (singles form separate groups according to sex and education). If $p_j$ is a group’s share in the population, $x_i$ its average income, and $T_j$ inequality in income within that group, the Theil-index can be estimated as:

$$ T = \sum_j p_j \frac{x_i}{\bar{x}j} \ln \left( \frac{x_i}{\bar{x}j} \right) + \sum_j p_j \frac{T_j}{\bar{T}} $$

We estimate ‘counterfactual’ values of $p_j$. Minimal homogamy: partners’ levels of education independent (multiplying for each cell of 4x4 population share of table row total with population share of column total).

### Data

**Luxembourg Income Studies for 21 countries**

Two time periods spaced at least one decade apart

Equivalized Disposable Household Income Inequality

Households comprised of singles or couples living with or without children; heads of households aged 30-64

Education: ISCED 1-2 / ISCED 3-4 / ISCED 5-6

Sample sizes in range [4251, 8852]