Oded Stark, University of Bonn – Social preferences and migration

First example

Let there be two regions A and B. Let there be two individuals in region A whose incomes are y and $3y$, where $y > 2$. Let the individuals in region B earn no more than $y-2$. The region A's individual whose income is y can migrate to region B where the income awaiting him is $y-2$. (Similarly, we can assume that migration from region A to region B entails a cost of two units of income.) The individual likes absolute income and dislikes relative deprivation, and assigns to these two terms in his utility function the weights of α and $-(1-\alpha)$, respectively, where $\alpha \in (0,1)$. Thus, the individual's utility function can be represented by $u(x, RD) = \alpha x - (1-\alpha)RD$, where x denotes the individual's income, and RD denotes his relative deprivation, defined as the aggregate of the income excesses divided by the size of the population. Then, if $\alpha y - (1-\alpha)\frac{1}{2}(3y-y) < \alpha(y-2)$, or, alternatively, upon rearrangement, if $\alpha < \frac{y}{y+2}$, the individual will prefer to migrate to region B. Defining $\frac{y}{y+2} = \frac{1}{1+\frac{2}{y}} \equiv \alpha_0$, it follows that as *y* increases, α_0 increases: as incomes rise, the constraint on α ($\alpha < \alpha_0$) for the individual's preference to migrate to region B becomes weaker. This is intuitive because the higher is *y*, the less meaningful the difference between *y* and $y-2$, so leaving region A for region B involves an increasingly smaller relative loss of income, along with a significant (complete) reduction in relative deprivation.