**Rake’s Progress Revisited**

1. **Family weights**
   * Usually family weight is defined as the weight of the householder or reference person; may under or over represent families with specific types of socio-demographic characteristics
   * “Averaging” over all individuals in the family may be preferable
   * Start with final person weight, compute the geometric mean at the family-level, then family weight is assigned to each person and raked to person-level control totals, and then iterate until convergence of family weights
   * Why geometric mean instead of arithmetic mean? Reduces the influence of extreme weights of any person within a family
2. **Person weights**
   * Usually a single set of weights are created for estimation
   * Different weights for different outcome variables should yield more efficient estimates
   * Allow for different variables to be used in raking for each outcome variable
   * Some of the variables used in raking would be the same for all weights
   * Not all variables used in raking are required to exactly agree with the control totals
   * Some variables only need to be within a designated threshold of the control totals
   * Weights are said to have converged if after iterating over all dimensions, weights are within the designated thresholds of the control totals for every dimension
   * Less variation in the raked weights and faster convergence
3. **Alternative Raking**
   * Calibrated weights are derived by minimizing the “distance” between the pre- and post- calibrated weights subject to agreeing with external population totals
   * To reduce variability of the weights, minimize the “distance” between the calibrated weights and average weight, and also “distance” between pre- and post- calibrated weights subject to agreeing with external population totals