Entropy-based benchmarking methods

Topic: Important issues in IO theory and practice
Author: Umed Temurshoev

We argue that the variants of Denton (1971) procedure, adapted by many national statistical institutes for benchmarking and temporal disaggregation (B/TD), do not satisfy the principles of (i) data stability and (ii) movement and sign preservation. The same applies to the growth rate preservation method of Causey and Trager (1981) which is usually found to be performing quite well either (see e.g., Chen 2007). A semiGRAS method proposed in this paper does satisfy these two principles, hence improves upon the Denton and Causey-Trager methods in estimating disaggregated series in the national accounts. We show these findings both analytically and empirically.