Abstract for “How Sensitive Are the Results in ICP 2011 to the Way the Regions are Linked Together?”

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The 2011 round of the International Comparisons Program (ICP) is divided into seven regions: Africa, Asia Pacific, the Caribbean, CIS, Eurostat-OECD, Latin America, Western Asia. Separate comparisons are made for each region. These regional comparisons are then linked first at basic heading level and then again at the aggregate level (aggregate level linking is required to ensure within-region fixity in the global results).

We will consider some alternative ways of linking the regions both at the basic heading level and at aggregate level. At basic heading level we compare Diewert’s region-product-dummy (RPD) method – which was actually used in ICP 2011 – with Hill’s symmetric-geometric-scaling (SGS) method. This issue of linking regions at basic heading level has received very little attention in the price index literature. We will also explore other methods that could be used in this context. Also considered will be the impact of including CIS and the Caribbean as equal partners in the linking exercise, as opposed to linking them in separately at the end of the comparison. (It seems likely that CIS will be linked in at the end in ICP 2011. It is still unclear how the Caribbean will be treated.)

A further issue that arises when linking at basic heading level is the use of importance indicators. Their impact will also be assessed. While weights of 3 to 1 (for products identified as important versus other products) will be used in ICP 2011, we will consider the impact of alternative weighting schemes such as 1 to 1 and 10 to 1. We will also compare linking methods at the aggregate level. ICP 2011 will use the country-approach-with-redistribution (CAR) method of Kravis, Heston and Summers to impose within-region fixity at the aggregate level. This method will be compared with Hill’s SGS method and some weighted variants on SGS. Also, the impact on the overall results of alternative aggregation methods (notably GEKS, weighted-GEKS and Geary-Khamis) for making the within-region and global unfixed comparisons will be considered.