International Input-Output Association

Working Papers in Input-Output Economics

WPIOX 09-005

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Consistency in Aggregation?
Trying the KLEMS data base

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Code: WPIOX 09-005

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Title:
Consistency in Aggregation? Trying the KLEMS data base

Abstract:
Value added is a key variable of input-output-tables and national accounts. In order to be used for productivity analysis it must be deflated to yield the "real value" or "volume" of the aggregate. The deflation method that has been standardised in the KLEMS data base produces figures which are inconsistent in aggregation or, - to use another expression, - which are non-additive. Independently of the theoretical position one takes vis-a-vis this fact, the paper studies the question of whether the effect is relevant, statistically speaking. For, if it falls between the margins of error, one may easily ignore it for all practical purposes. The investigation of Danish data, chosen as example, results in mixed findings. For some of the industries inconsistency in aggregation is negligible, for others it comes out at the order of 50 percent of value added. A new deflation method is therefore introduced and tried, which is consistent in aggregation, and has the additional advantage that it clarifies the distinction between the real value and the variation in volume of a value added time series.

Keywords: Value added, deflation methods, chaining, additivity, KLEMS data base

Archives: Methods and mathematics, Construction of input-output tables

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Date of submission: July 30, 2009