

Methods for deflating Multi-Regional Input-Output tables

Topic: Input-Output Accounts (1)

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This study addresses a fundamental question in input-output research: how should Multi-Regional Input-Output tables be deflated to ensure consistency, comparability, and analytical reliability? Although deflation is essential for converting monetary flows into constant prices and enabling temporal analysis, many widely used Multi-Regional Input-Output databases are distributed only in nominal terms. This raises substantial methodological challenges for researchers and can lead to distorted multipliers, inconsistent policy simulations, and biased economic assessments. To examine these issues, the paper conducts a systematic methodological assessment combining: (1) a review of established deflation practices, (2) a comparative evaluation of alternative deflation strategies, and (3) empirical illustrations using sectoral and regional data. The analysis focuses on the selection and alignment of price indices, the treatment of heterogeneous sectors, and the effects of different aggregation schemes on model outcomes. Using EXIOBASE data allows us to quantify how methodological choices in deflation propagate through results, thereby identifying the magnitude and nature of biases introduced by alternative procedures. The study's main contribution lies in providing a structured and transparent framework for deflating Multi-Regional Input-Output tables, integrating theoretical considerations with practical implementation criteria. Unlike previous work, the paper synthesizes methodological guidance with empirical diagnostics, offering a comprehensive set of recommendations designed to enhance reproducibility and analytical robustness.