Correlations among direct input coefficients and its applications to update IO tables: a empirical investigation

Topic: National accounts

Author: Xu Jian

Co-Authors: Xiaolin Lu

Coefficient change in input-output model has attracted wide attention, but there is relative little research on correlations among change in direct input coefficients. This paper applies some important correlation measures including Pearson's correlation coefficient, Spearman's rank correlation coefficient and Kendall coefficient to investigate correlations among direct input coefficients based on Chinese national input-output tables for 1992,1995,1997,2002 and 2005. Several coefficient groups consisted of those direct input coefficients with strong correlations each other are identified and the reasons of existing correlation are proposed. Identifying correlations among direct input coefficients has important meanings in many aspects. For example, it will provide new information when updating IO tables. This paper improve traditional updating procedures by introduce coefficient correlations information. Better performance of new procedure is proved.