Productivity and Efficiency in the Handbook of Input-Output Analysis

Topic: 711D Productivity and Efficiency (1)

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The Handbook of Input-Output Analysis is now edited, by me. Drafts of productivity analysis (the chapter by myself) and efficiency analysis (the chapter by Victoria Shestalova) will be presented. Input-output coefficients, the amounts of inputs required to produce outputs, are a useful tool for impact analysis (involving input-output multipliers) and imputations (involving factor contents, e.g. in international trade and ecological footprints). I relate input-output analysis to productivity analysis. Conceptually, productivity is the amount of output produced per unit of input, i.e., the inverse of input-output coefficients. This relationship is made precise, in a way that consolidates the input-output literature on productivity and efficiency. Statistical offices present input-output tables on the basis of industry totals, which amount to taking averages. However, the idea of Leontief has been that the coefficients represent technology. Besides averages best practices better enter the calculation. This distinction facilitates the measurement of inefficiencies.