Book Review

Brauers, W. K.—*Input–Output Analyse en Internationale Economische Integratie, Preface by W. Leontief and with English Summary* (Input–Output Analysis and International Economic Integration).

Antwerp, Utrecht, Standaard Wetenschappelijke Uitgeverij, 1968, 276 p., 825 BF.

Since W. W. Leontief published his input–output tables in 1941, research in this area has expanded. Dr. Brauers has made an important contribution to this field in two respects. First he introduces and applies some interesting concepts and second, he extends I–O analysis to problems of choice and prediction in international economic integration.

The book consists of two parts. Part one treats static and dynamic I–O theory. An abundance of well selected applications to the Belgian Economy illustrates the theoretical framework. Noteworthy is the concept of the "activity multiplier", which measures the effect of a marginal increase of a final demand component on the production of all sectors. An activity multiplier for final demand component i can mathematically be stated as:

$$M_i = \sum_{k=1}^{k=m} A_{ik}$$

where the A coefficients stem from the i-th column of the inverted matrix of production coefficients.

The author attacks the problem of aggregation into sectors in a pragmatic way. The necessity for a universal and well defined content of sectors is stressed.

Dynamic factors appear in the form of variable production, labor and capital coefficients. Here, an alternative method (P.E.S.) to the R.A.S. technique is suggested based on price adjustments, quantitative extrapolations and structural change.

In the second part of the book, input–output analysis is situated in an economic space, formed by countries participating in a process of economic integration. It is assumed that integration will affect technical coefficients through substitution and scale effects. If these changes can somehow be predicted, future trade flows could be quantified as well. Using linear programming, the author solves different cost minimizing models for the optimal production pattern, under several constraints: full employment, restricted output capacity and lack of labor mobility.

This book is written by an experienced economist in the field of input–output. After reading the second part, one looks forward to a future application on European level.

Louvain (Belgium)   P. van Rompuy