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LINEARE ÖKONOMISCHE MODELLE

(Linear Economic Models)

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The reviewed book consists in fact of the lecture notes "Linear Economic Models" delivered by the authors at Bonn University. The course is intended for students specializing in general economics, having knowledge of linear algebra and are interested in the economic aspects of linear programming. The work is added to some well known works, such as D. Gale "Linear Economic Models" and R. Dorfman, P. Samuelson, R. Solow "Linear Programming and Economic Analysis". In this way, the authors do not bring any new elements for those desirous of thoroughly studying the mathematical problems of the theme or the aspects of interest to specialists in operations research. The work does not cover applications at a microeconomic level, focussing on those aspects of the linear optimizing theory that are necessary for the economic theory. Nevertheless, the covering of the dynamic linear models, for example of the von Neuman type is omitted.

According to the orientation of the authors, the seven chapters approach the distribution theory, the linear analysis of activities, the input-output analysis, linear programs (in case of a single product), the simplex algorithm, the revised simplex algorithm (the problem of centralized planning in case of incomplete information) and the decomposition principle (planning decentralization). Each chapter is accompanied by a selective bibliography, including the most significant works devoted to the respective theme. An appendix recapitulates necessary for comprehension (convex space, hyperspace, semispace, exterior points, etc.). Considering the methodological and economic-mathematical orientation of the work, the political-economic introductory considerations seem superfluous to us, having questionable validity.

The work is written correctly and clearly, having exceptional methodical-didactic qualities. Of special interest are the problems concerning the application of linear analysis to the optimization and planning of economic activities. Worth mentioning is the lucidity with which the problems of decomposition are presented, as a method of combining centralized planning with the decentralized fulfilment of plans. The book represents an interesting study material for economists in general.

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