

INTRODUCTION

The papers in this volume were presented at the XII-th International Conference on "Problems of Building and Estimation of Large Econometric Models «Macromodels '85»" held in Szczyrk, Poland, in December (11-13) 1985. The conference was organized by the Institute of Econometrics and Statistics, University of Łódź and by the Committee of Statistics and Econometrics, Polish Academy of Sciences. It was attended by 105 participants, including 45 persons representing various foreign econometric centres. The guest of honour of the conference was Professor Lawrence R. Klein (USA) - Nobel's Prize Winner in 1980.

The total number of the delivered papers amounted to 38¹. They were divided into the following subject sessions:

1. Models of socialist economies.
2. Disequilibrium models.
3. World and regional models.
4. Input-output models.
5. Sectoral models.
6. Techniques and procedures in macromodelling.
7. Estimation of macromodels.

The papers chosen to this volume cover mainly the area of macromodelling represented by the Sessions 1-5 while the papers dealing with econometric methods and techniques will be published in the volume "Problems of Building and Estimation of Large Econometric Models (Part B), Proceedings of Macromodels '85", Polish Academy of Sciences.

¹ The complete list of papers with abstracts is presented in "Przegląd Statystyczny" 1987, nr 1.

The volume begins with the paper by Professor L. R. Klein (University of Pennsylvania, USA) on the problems of analysis and projection of the world economy based on the simulations of the LINK Project.

The other papers are grouped into four sections. The first consists of four presentations on modelling of socialist economies. V. Dlouhý discusses the underlying hypotheses prevailing in the CPE modelling in the context of economic policy stabilization and strategy of development. I. Kudrycka presents a quarterly model of the Polish economy, applied to the construction of short-term forecasts. Model consists of three submodels - modern use of trend and Box-Jenkins procedures, production functions, input-output relationships and reflects the shortages in economy. D. Štrauch presents the structure of the model of the Czechoslovak economy constructed for the purposes of policy simulations and medium-term projections. W. Welfe discusses the new features of the W-5 model of Polish economy which is being used to study the implications of economic crisis and recovery in Poland. Model consists of more than 1200 equations describing both the demand and the supply side of economy generating also the unobservables (i.e. excess demand, production capacities).

The second section contains three papers discussing the disequilibrium type models applied to socialist economy, both the problems of particular market modelling and the general problems of disequilibrium modelling. W. Charemza and R. E. Quandt present a model of automobile market in Poland in which the existence of permanent demand excess is assumed. The estimates of the model are used to generate the mean time of waiting period for new cars. A. Welfe discusses the modelling of consumer goods markets under disequilibrium and inflation. The constructed model WA2 allows to quantify the impact of alternative wage and price policies on the market disequilibria in a context of simulation analysis and forecasting. K. Stupnicki makes a comparison of the theories of disequilibrium for the CPE's economies by J. Kornai and R. Portes indicating some similarities and pointing out the differences in the operational approaches.

The third section of the volume concerns the problems of the world economy modelling. J. Głowacki presents a simplified model

of the world trade consisting of two interdependent sectors: prices and trade flows. The simulation analysis helps to identify the sensitivity of the model to the changes in the world wide policies. J. Kotyński analyzes trade intensity between the two important groups of countries - EEC and CMEA. The proposed measures of trade intensity are used to facilitate interregional comparisons and more specifically to analyze geographic concentration in commodity groups and the tendencies in trade distribution.

The last section consists of four papers. The first three deal with the sectoral modelling. The paper by A. Bayar, M. Deimezis, Z. Erlich, Y. Guillaume and D. Meulders presents an application of optimal control technique to the problems of employment in Belgium. A macromodel of the Belgian economy is used, in which the employment sector is developed especially for the needs of analysis. M. Lubera analyzes the relationships between the employment in the sector of services and the growth of the national economy. J. J. Sztudynger discusses problems of identifying and measuring the bottlenecks in production sector. The substitution and complementarity of production factors are analyzed and their solution using different approaches of production function modelling. The last paper by R. Stäglin concerns the different approaches to structuring the input-output. Two types of tables, based on commodity flows and on market transactions are discussed; an illustration of the input-output system for the F.R.G. is provided.

Władysław Welfe, Paweł Tomczyk