

FOREWORD

The purpose of this symposium issue of the *Socio-Economic Planning Sciences* is to honor William H. Miernyk on the occasion of his retirement for his numerous and lasting contributions to regional economics and regional science. Virtually everyone who has had any exposure to input-output analysis is familiar with his classic introductory treatment, *The Elements of Input-Output Analysis* (Miernyk 1965). His role in the development of this field, however, has not been limited to providing a concise, readable explanation of the basics. For example, his 1965 input-output model for West Virginia is widely recognized as one of the best such regional models ever constructed, largely because of the unusual care with which the parameters of the model were estimated. As Prof. Miernyk explains in *Simulating Regional Economic Development* 1970, the West Virginia model was based on data covering interindustry sales and purchases obtained from a probability sample of establishments.

In constructing the 1965 West Virginia model, Miernyk also collected data on the capital stocks and capacity utilization of the West Virginia economic sectors. Those data enabled him to construct one of the few existing operational dynamic regional input-output models. Moreover, in connection with implementing that model, he developed the methodology for identifying "best practice" establishments. Information from those establishments became instrumental in estimating the probable impact of technical change on production relations in the West Virginia economy.

Professor Miernyk's contributions in the area of regional analysis also extend to methods for examining the economic consequences of rising energy prices, environmental pollution, and the location of facilities associated with the space program. For example, in *Regional Impacts of Rising Energy Prices* Prof. Miernyk employed an input-output framework in an analysis of the windfall gains enjoyed by the energy producing sectors and the energy-producing states from 1967 to 1974. In the same volume, attention also was drawn to the particularly severe dislocations experienced by the northeastern states during this time period. In *Air Pollution Abatement and Regional Economic Development* (1974), Prof. Miernyk developed methods for estimating the economic impacts of environmental protection and coal gasification. Another book, *Impact of the Space Program on a Local Economy*, contains excellent chapters on the appropriate methodology to be used in economic base and input-output studies; in Chapter V he developed the Type III multipliers in which households are treated as neither exogenous nor endogenous sectors.

This discussion can highlight only a selection of Prof. Miernyk's impressive contributions to the development of methods for regional analysis. It does

not adequately reflect the context in which most of these contributions were made. In particular, Prof. Miernyk has not fallen into the trap of developing and then refining a set of non-operational or never-to-be-implemented modeling approaches for their own sake. Rather, his contributions to methods of analysis have arisen naturally, in the course of examining broad issues of regional economic development. Since his arrival at West Virginia University in 1965, a substantial share of Prof. Miernyk's writing has focused not only on the topics of air pollution abatement and energy prices, but also on questions relating to unemployment, labor force participation, and migration in the Appalachian states. At the forefront has been a concern for understanding why that region has experienced a slower rate of economic development than the rest of the United States, what policies are available to rectify the problems encountered, and how the impacts of federal policies on that region are appropriately measured. In short, Prof. Miernyk has adopted the very useful perspective that the policy questions to be analyzed must dictate the analytical methods to be developed. That perspective together with his concern for the economic problems unique to the Appalachian states undoubtedly were key considerations in his election as President of the Southern Regional Science Association in 1975.

In addition to this issue of *Socio-Economic Planning Sciences*, a special issue of the *International Regional Science Review* has also been published in Prof. Miernyk's honor. That issue consists of papers by (1) Jeffery I. Round on "Nonsurvey Techniques: A Critical Review of the Theory and the Evidence," (2) William B. Beyers on "On the Interregional Structure of the U.S. Economy," (3) Ronald E. Miller and Peter Blair on "Estimating State-Level Input-Output Relationships from U.S. Multiregional Data," (4) Niles Hansen on "International Cooperation in Border Regions: An Overview and Research Agenda," and (5) Benjamin H. Stevens, George I. Treyz, David J. Ehrlich, and James R. Bower on "A New Technique for the Construction of Non-Survey Regional Input-Output Models." Most of the papers in both of these special issues were among those presented in honor of Prof. Miernyk at the North American Meetings of the Regional Science Association held in Pittsburgh in November 1982.

These papers are dedicated to Prof. William Miernyk in gratitude for his important contributions to regional science as a scholar, teacher, and colleague.

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BOOKS BY WILLIAM MIERNYK

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