Ruggles and Ruggles—A National Income Accounting Partnership

THE recent death of Richard Ruggles ends a distinguished research career. In the field of national income accounting, it is impossible to separate his contribution from the contribution of his research partner and wife Nancy Dunlop Ruggles, who died in 1987. This tribute is to both of them.

The importance of the contributions of the Ruggleses to the field of national income accounting has long been recognized. A summary of their expertise was provided in the editor's note to the presentation and discussion of their integrated economic accounts for the United States in the May 1982 Survey of Current Business:

Their qualifications for this undertaking are unique: familiarity with the intricacies of the U.S. national income and product accounts that may be unparalleled outside BEA; association with work in economic, social, and demographic statistics at the United Nations; participation in the activities of the professional organizations in the field, especially the International Association for Research in Income and Wealth and its *Review of Income and Wealth*; and service as consultants on statistical programs in the United States and abroad. (Ruggles and Ruggles 1982, 1)

From the beginning, their research focused on measurement issues and national income accounting. Both of their doctoral theses were concerned with prices. At the Office of Strategic Services during World War II, Richard Ruggles developed a surprisingly accurate system for estimating German tank production on the basis of the serial numbers of captured German tanks (Feder 2001, A-25). In the years immediately after World War II, Richard and Nancy Ruggles became heavily involved in national income accounting. Around 1947, the Economic Cooperation Administration decided to use national income accounting as a basis for distributing aid under the Marshall Plan and for assessing the European economic recovery, and the Ruggleses developed a fiveaccount system for these purposes.1 Eventually, this system was adopted as the basic framework of the U.S. national accounts. Richard Ruggles' book An Introduction to National Income and Income Analysis was the standard textbook exposition on the U.S. national accounts until 1951, when the first U.S. Government publication explaining the conceptual and statistical bases for the national accounts figures was published (Carson 1971).² Later, *The Design of Economic Accounts* became the standard academic reference for national income accounting (Ruggles and Ruggles 1970).

The Ruggleses interacted regularly with the Bureau of Economic Analysis and its predecessors. Richard Ruggles was a member of the National Accounts Review Committee of the National Bureau of Economic Research, which in 1957 prepared a major review of the national accounts at the request of the Bureau of the Budget (the predecessor of the Office of Management and Budget); this review committee recommended the adoption of the five-account system. The Ruggleses developed an experimental set of accounts as part of a long-term project to evaluate the feasibility of extending the U.S. accounts to encompass balance sheets (Ruggles and Ruggles 1982). The Ruggleses also contributed an article to the 50th anniversary issue of the Survey on the historical evolution of the national accounts and the national database (Ruggles and Ruggles 1971).

The Ruggleses proposed to extend the national accounts in several directions. First, they recommended the integration of and the linking of macrodata with microdata, including demographic data on race, age, education, and sex. Second, they recommended that the production boundary be extended to include imputations for nonmarket activities, such as the services of household and government capital; for intangible capital, such as future pensions and the discounted future earnings of human capital; and for changing environmental conditions.³ Finally, they proposed that balance sheets include the development of capital transactions accounts and revaluation accounts. The Ruggleses' own integrated economic accounts included estimates for some of these extensions.

The research undertaken by Richard and Nancy Ruggles had an impact on national income accounting both in the United States and around the world. Their accomplishments in estimating and formulating the bases for integrated accounts spanned half a century, and their legacy continues.

^{1.} In his autobiography, Nobel Prize Laureate Sir Richard Stone comments that he believes Richard Ruggles came up with the idea of using national accounts for these purposes (Stone 1984).

^{2.} See U.S. Department of Commerce 1951.

^{3.} Since the 1995 comprehensive revision, the national income and product accounts has included imputations for the services of government capital.

Selected Bibliography

Carson, Carol Stine. 1971. "The History of the United States Income and Product Accounts: The Development of an Analytical Tool." Ph.D. dissertation, The George Washington University, Washington, DC.

Feder, Barnaby J. 2001. "Richard Ruggles, Economist; Developed Measurement Tools, Dies at 84." *New York Times*, March 10, 2001, A–25.

Judd, M. Ann. 1999. "The Yale Economics Department: Memories and Musings of Past Leaders." Available at <www.econ.yale.edu/depthistory.html>.

Ruggles, Nancy, and Richard Ruggles. 1970. *The Design of Economic Accounts*. New York: Columbia University Press, for the National Bureau of Economic Research.

Ruggles, Richard. 1949. *An Introduction to National Income and Income Analysis*. New York: McGraw-Hill Book Company.

Ruggles, Richard, and Nancy Ruggles. 1971. "The Evolution of National Accounts and the National Data

Base." In *The Economic Accounts of the United States: Retrospect and Prospect.* Survey of Current Business 51, Part II, 50th anniversary issue (July 1971): 152–161.

Ruggles, Richard, and Nancy D. Ruggles. 1982. "Integrated Economic Accounts for the United States, 1947–80." Survey of Current Business 62 (May1982): 1–53.

Ruggles, Richard, and Nancy D. Ruggles. 1980. "Integrated Economic Accounts for the United States, 1947–78." Working paper no. 841. Institution for Social and Policy Studies. Yale University, New Haven, CT, November.

Stone, Richard. 1984. "Autobiography of Richard Stone." Available at <www.nobel.se/economics/laure-ates/1984/stone-autobio.html>.

U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce. 1951. *National Income and Product of the United States*, 1929–1950. A supplement to the Survey of Current Business, Washington, DC: U.S. Government Printing Office.