# **ALBERT K. ANDO (1929-2002)**

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ALBERT K. ANDO (1929-2002) Albert K. Ando is an eminent Japanese-born American economist who made many seminal contributions in a broad range of areas of economics. Born in Tokyo, Japan, on November 15, 1929, Ando went to the United States after World War II instead of joining the family business (ANDO Corporation, a major construction company). He received his B.S. in economics from the University of Seattle in 1951, his M.A. in economics from St. Louis University in 1953, and an M.S. in economics in 1956 and a Ph.D. in mathematical economics in 1959 from Carnegie Institute of Technology (now Carnegie Mellon University). After teaching at Carnegie and the Massachusetts Institute of Technology, Ando moved to the University of Pennsylvania in 1963 and remained there until his death from leukemia on September 19, 2002, first as an associate professor of economics and finance, and from 1967, as a professor of economics and finance.

Ando held visiting appointments at universities in Louvain, Bonn, and Stockholm and consulted with the International Monetary Fund, the Federal Reserve Board, The Bank of Italy, and the Economic Planning Agency of Japan.

During his long and productive career, Ando received many honors and awards. For example, he was named Fellow of the Econometric Society, Ford Foundation Faculty Research Fellow, Guggenheim Fellow, and Japan Foundation Fellow and was given the Alexander von Humboldt Award for Senior American Scientists.

Ando made important contributions in such diverse fields as econometrics (theory and applications), stochastic optimal control, the theory of aggregation and partitions in dynamic systems, monetary economics, macroeconomic modeling and policy design

with emphasis on interactions between economic growth and cyclical fluctuations, investment behavior, theoretical and empirical investigations of household saving and consumption behavior, and demography, and his geographic breadth was equally great with particular focus on Italy, Japan, and the United States. Ando collaborated, among others, with Nobel laureate Herbert Simon on questions regarding aggregation and causation in economic systems (see, for example, Simon and Ando (1961) and Ando, Fisher, and Simon (1963)) and with another Nobel laureate, Franco Modigliani, on extending the life cycle hypothesis of saving (see, for example, Ando and Modigliani (1963)) and constructing large-scale macroeconomic models (see, for example, Ando and Modigliani (1969)).

A common thread in much of Ando's work is the care with which he analyzed data. He subjected all of the data he used (be it national accounts data, data from household surveys, or company data) to careful scrutiny, was constantly on the lookout for inconsistencies, conceptual deficiencies, etc., in the data, and made the necessary adjustments to the data to correct for any inconsistencies, conceptual deficiencies, etc. He then analyzed the resulting data meticulously and creatively to shed light on important questions such as the causes of the decade-long recession in Japan in the 1990s (he found that it was due primarily to the massive capital losses on household holdings of corporate equities; see, for example, Ando (2002a)), whether aged households dissave (he found that they dissave relatively rapidly in Italy and the U.S. but moderately or not at all in Japan; see, for example, Ando and Kennickell (1987), Hayashi, Ando, and Ferris (1988), and Ando and Nicoletti-Altimari (2004)), how the cost of capital compares in the U.S. and Japan (he found that it is considerably higher in the U.S. if individual company data are used but not if national accounts data are used;

see, for example, Ando and Auerbach (1990) and Ando, Hancock, and Sawchuk (1997)), etc., etc.

Ando played a central role in the construction of the *M*assachusetts Institute of Technology, University of *P*ennsylvania, and *S*ocial Science Research Council (MPS) model, an early large-scale macroeconomic model of the U.S. economy, as well of the Bank of Italy's macroeconomic model of the Italian economy (see, for example, Ando and Modigliani (1969) and Ando (1974)), and in his later years, he devoted considerable energy to constructing a dynamic micro simulation model of demographic structure for Italy, Japan, and the United States, which he used to project future trends in the saving rate (he projected that Japan's saving rate would increase slightly in the immediate future as the number of children per family declined sharply, then fall moderately as the proportion of older persons in the population increased, and he projected similar trends in Italy as well; see, for example, Ando, et al. (1995) and Ando and Nicoletti-Altimari (2004)).

#### CHARLES YUJI HORIOKA

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