

An Appreciation

John W. Kendrick (1917–2009)

John W. Kendrick, a pioneering economist in productivity measurement and economic accounting, died on November 17, 2009, at the age of 92. The ideas developed by Kendrick and other proponents of expanded economic accounts remain relevant today. Many of their ideas are embodied in a report by the Commission on the Measurement of Economic Performance and Social Progress, chaired by Joseph Stiglitz, which explores the adequacy of gross domestic product as an indicator of economic performance and social progress. Earlier in his career, Kendrick made important technical contributions to the national economic accounts when he was an employee of the predecessor agency to the Bureau of Economic Analysis (BEA).

Kendrick was a leader of work in the 1970s that sought to expand the scope of national economic accounting by broadening the concepts of capital and production. Other influential economists who favored expanding the accounts to better measure the effects of productivity included Edward Denison, Zvi Griliches, and Dale Jorgenson. Other economists focused more on expanding the accounts to better measure economic well-being; this group included Robert Eisner, William Nordhaus, James Tobin, and Nancy and Richard Ruggles.

Kendrick was among the first to develop empirical estimates of broader measures of investment. In *The Formation and Stocks of Total Capital* (1976), he expanded the idea of tangible investment to include durable goods owned by government and consumers, and he defined intangible investment to include investment in research and development, education and training, health, and mobility. In a 1979 article in the *Review of Income and Wealth*, Kendrick made a case for expanded U.S. national economic accounts along these lines. He produced estimates for the value of time spent in unpaid household work, volunteer labor, school work, and frictional unemployment. He also imputed rentals to household capital, institutional capital, and government capital. Kendrick estimated that including these imputations would have boosted gross national product more than 60 percent in 1973.

In addition, Kendrick was considered a leader in the

field of productivity measurement and growth accounting. In a 1951 article in the *SURVEY OF CURRENT BUSINESS*, Kendrick and Carl Jones measured “composite productivity” in the farm sector by taking into account capital as well as labor inputs. This was one of the first empirical uses of a measure that has since been termed “total factor productivity” or “multifactor productivity.” In 1961, Kendrick, with the help of Maude R. Pech, wrote *Productivity Trends in the United States*, in which he discussed the effect of productivity and investment in intangible capital on economic growth. Solomon Fabricant, then director of research of the National Bureau of Economic Research (NBER), considered this work “the most comprehensive survey of productivity trends in the United States ever made.”

Kendrick received a bachelor’s degree in history and a master’s degree in economics from the University of North Carolina at Chapel Hill. In 1946, Kendrick joined the Office of Business Economics, which was the predecessor to today’s BEA. In 1953, Kendrick joined the senior staff at NBER. In 1955, he received a doctorate in economics from George Washington University. From 1976 to 1977, he served as Chief Economist for the Department of Commerce. From 1955 until his retirement in 1988, he was a professor of economics at George Washington University, where he taught a course on national income accounting and productivity. Many BEA staff attended this course and were influenced by him.

Selected references

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