

Chronicling 100 Years of the U.S. Economy

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Top Influencers

The Bureau of Economic Analysis (BEA) and its journal, the *Survey of Current Business*, are respected sources of data on the health of our national economy due in large part to the individuals who influenced BEA and its predecessor agencies over the past century. From economic theory to the mechanics of producing reliable statistics, their contributions helped make BEA and its accounts the reliable, authoritative sources of economic data they are today. The *Survey* has chronicled the evolution of BEA's output for almost a century.

As we celebrate the centennial of the *Survey*, some of these top influencers will be profiled on the centennial website. This month, we present economist **John Kendrick**.

John Kendrick

Leader in Productivity Measurement and Economic Accounting

By Erin Whitaker

The contributions of John W. Kendrick to economic theory, particularly the study of productivity, provided a framework for understanding the national accounts. His work with the U.S. Office of Business Economics, the predecessor agency to the Bureau of Economic Analysis (BEA), presented (along with George Jaszi) the first estimates of gross national product (GNP) in constant dollars based on price deflation.¹ His continued work as the Chief Economist for the Department of Commerce and as an academic influenced further development and enhancement of BEA statistics.

Kendrick was born in Brooklyn, NY, and grew up in North Carolina, where his father taught at what is now the University of North Carolina (UNC) at Greensboro. He also pursued advanced research, earning both an undergraduate degree in history and a master's degree in economics from UNC Chapel Hill by 1939. He briefly worked in academia at the University of Georgia² before turning to government and military service, first in Washington on the National Resources Planning Board in 1941 and then with the U.S. Army Air Forces from 1943 to 1945. He then spent a year with the U.S. Bombing Survey in Europe, before returning to Washington in 1946 to join the U.S. Office of Business Economics.

His career in government statistics included the aforementioned estimate of GNP in constant dollars and a paper with Carl Jones that measured "composite productivity" in farming that related the growth of an output to the combination of labor inputs, capital assets, and land.³ This paper, one of the first uses of a measure of total factor productivity,⁴ was referenced in the 1953

annual report of the National Bureau of Economic Research (NBER), where Kendrick would serve as a senior researcher until 1977. He would also further develop the concept of total factor productivity as a doctoral candidate at George Washington University, where he received his degree in 1955. Kendrick expanded on this research at NBER and released his first major work, with Maude Peck, *Productivity Trends in the United States*, in 1961. Then director of research of NBER Simon Fabricant considered this work "the most comprehensive survey of productivity trends in the United States ever made."⁵ He went on to author several additional volumes, most notably *The Formation and Stocks of Total Capital* in 1976, which expanded the concept of tangible investment as well as intangible investment. This would eventually serve as a guide for the expansion of BEA's Research and Development Satellite Account⁶ as well as household production in the national accounts.⁷ Along with the influence of his research, he again supported BEA and the Commerce Department as a whole, serving as Chief Economist from 1976–1977.

Kendrick's research and academic work would eventually include 12 volumes on economics and productivity, including a popular textbook. He also wrote the *Encyclopedia Britannica* article on productivity!⁸ He served as a professor of economics at George Washington University from 1955 until his retirement in 1998 and influenced many BEA researchers, particularly former BEA director Carol S. Carson. He supervised her dissertation "The History of the United States Income and Product Accounts: The Development of an Analytical Tool."⁹

Kendrick passed away on November 17, 2009, at the age of 92, after a distinguished career of public service and many contributions to BEA's economic accounts. His publications are often referenced in the *Survey of Current Business*. For more on John Kendrick, see an "An Appreciation: John W. Kendrick (1917–2009)" in the February 2010 *Survey*.

5. See note 4 above.



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^{1.} See Review of Income and Wealth, Series 56, Number 3, September 2010, p. 648

^{2.} See note 1 above, p. 647.

^{3.} See note 1 above.

^{4.} Arnold J. Katz and Bruce T. Grimm, "An Appreciation: John W. Kendrick (1917–2099)," *Survey of Current Business* 90 (February 2010): 53.

^{6.} See Carol S. Carson, Bruce T. Grimm, and Carol Moylan, "A Satellite Account for Research and Development," *Survey* 70 (November 1994): 39–40.

^{7.} See Benjamin Bridgman, Andrew Dugan, Mikhael Lal, Matthew Osborne, and Shaunda Villones, "Accounting for Household Production in the National Accounts, 1965–2010," *Survey* 88 (May 2012): 23.

^{8.} See Encyclopedia Britannica article on productivity.

^{9.} See EconPapers article "The History of the United States National Income and Product Accounts: The Development of an Analytical Tool" by Carol S. Carson.