

This Week's Citation Classic

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Jorgenson D W. Capital theory and investment behavior.

Amer. Econ. Rev. 53:247-59, 1963.

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This paper presents an econometric model of investment behavior based on the neoclassical theory of optimal capital accumulation. The paper incorporates tax policy as a determinant of investment expenditures through the rental price of capital services. [The *Social Sciences Citation Index*[®] (SSCI[®]) indicates that this paper has been cited in over 195 publications since 1966.]

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"This paper is the progenitor of a series of 25 papers I have written on the econometrics of investment behavior. Much of this work was carried out in collaboration with my graduate students at the University of California, Berkeley, including Sidney S. Handel, M. Ishaq Nadiri, Calvin D. Siebert, and James A. Stephenson, and with one undergraduate student, Robert E. Hall. Results published through 1971 were summarized in my review article in *Journal of Economic Literature*.¹

"My *American Economic Review* paper has been widely cited because it contains three original ideas that have been extensively developed by myself and my students, and by others. First, there is the idea of incorporating price effects into the econometric modeling of investment behavior through the

rental price of capital services. This idea was the key to treating investment behavior as part of the economic theory of producer behavior and has been employed in almost all subsequent work on the econometrics of investment. I have published a more detailed treatment of this idea in two articles that appeared in 1967 and 1973.^{2,3}

"The second key idea in my article is the use of rational distributed lag techniques in modeling economic behavior. At the time my article was published, this idea represented a considerable advance in statistical technique for analyzing economic time series. I later published a more detailed treatment of the technique in a paper that appeared in *Econometrica* in 1966.⁴

"The third idea presented for the first time in my paper is the incorporation of the impact of tax policy on investment behavior through the rental price of capital services. This technique has now become standard in the economics of public finance. Closely related ideas have been used in analyzing a wide range of economic behavior, including savings, labor supply, and demand for specific commodities.

"My paper and the research that followed it resulted in my receiving the John Bates Clark Medal of the American Economic Association in 1971. This medal is awarded every two years to a person under 40 who has made a contribution to economics. The citation for my award reads in part: 'His prolonged exploration of the determinants of investment spending, whatever its ultimate lessons, will certainly long stand as one of the finest examples of the marriage of theory and practice in economics.'"

1. Jorgenson D W. Econometric studies of investment behavior: a survey. *J. Econ. Lit.* 9:1111-47, 1971.
2. The theory of investment behavior. (Ferber R, ed.) *The determinants of investment behavior*. New York: Columbia University Press, 1967. p. 129-56.
3. Technology and decision rules in the theory of investment behavior. *Quart. J. Econ.* 87:523-43, 1973.
4. Rational distributed lag functions. *Econometrica* 34:135-49, 1966.