In Memoriam: Franklin M. Fisher

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Franklin M. Fisher passed away on April 29, 2019 at the age of 84. Fisher was one of the most versatile and accomplished economists of his generation. He made important contributions to economic theory, to the design and application of econometric tools, to the study of firm behavior, and to the application of economic analysis in competition policy.

Fisher was a star undergraduate at Harvard College, where he was mentored by industrial organization economist Carl Kaysen. After graduating *summa cum laude* in 1956, he remained at Harvard for graduate school, earning his Ph.D. three years later under the supervision of John Meyer. As a graduate student, he was elected to a junior fellowship in Harvard’s Society of Fellows, thereby securing relief from teaching responsibilities. Fisher spent one year at the University of Chicago as an assistant professor after completing his Ph.D., then returned to Cambridge, where he joined the faculty at the Massachusetts Institute of Technology (MIT). He remained at MIT for the rest of his career. At the time of his death, he was the Dennis and Jane Berkowitz Carlton Professor of Applied Economics, emeritus.

Fisher played an important role in graduate education at MIT. He supervised more than sixty doctoral dissertations. His dry wit and love of stories, particularly funny ones, made him a beloved teacher and advisor. He introduced hundreds of MIT graduate students to both microeconomic theory and econometrics, often delivering without notes technical lectures that were interspersed with references to literature and performing arts.

Fisher’s scientific contributions ranged widely. In economic theory, he made important advances in the theory of aggregation, focusing in particular on the conditions under which it was possible to construct a meaningful aggregate capital stock or to combine the production functions for different firms to construct an aggregate production function. In related research, he studied the measurement of technological change when such change is embodied in heterogeneous capital goods. These issues were summarized in his Fischer-Schultz Lecture, presented at the 1968 European meetings of the Econometric Society. Fisher’s findings on aggregation were a significant contribution to the Cambridge-vs.-Cambridge capital theory debates of the 1960s.

Fisher recognized that insights about the aggregation of quantities, such as output or capital stocks, also had important implications for the aggregation of prices when constructing price indices. In joint research with Karl Shell, Fisher developed the theory of price index construction in the presence of time-varying consumer tastes, technological change, and product quality. This research was summarized in their 1972 book, *The Economic Theory of Price Indices*.

Fisher also carried out a research program on stability and equilibrium dynamics, arguing that one of the most important questions in economics was how economic systems adjusted when out of equilibrium. He studied how the degree to which economic agents perceive arbitrage opportunities that are created by markets that are out of equilibrium determines disequilibrium dynamics, and concluded that there was no guarantee that an out-of-equilibrium economy would converge to a Walrasian equilibrium. Fisher’s major findings were published in his 1983 treatise, *Disequilibrium Foundations of Equilibrium Economics*.

In econometrics, Fisher’s theoretical research focused on identification in simultaneous equation models. He studied identification in block-recursive systems, explored questions of causal inference in multi-equation models, and analyzed how specification errors affected various estimators, particularly the family of k-class estimators. His 1966 classic, *The Identification Problem in Econometrics*, provided a systematic review of the conditions under which specific parameters in systems of
The insight, wit, and analytical power that Fisher brought to economics will be sorely missed.