



Vernon L. Smith
Nobel Laureate 2002

Vernon L. Smith was born in the flat plains of Wichita, Kansas during the boom years preceding the Great Depression, January 1, 1927. Born to politically active parents, Vernon's early ideological indoctrination would prove pivotal to his attraction to the economic sciences.

While earning his bachelor's degree in electrical engineering at the California Institute of Technology in 1949 Smith took a general economics course. Intrigued, Smith pursued the science, receiving a Masters in Economics from the University of Kansas in 1952 and a Ph.D. from Harvard University in 1955.

Dr. Smith's initial training in the hard sciences lead him to pursue the application of the scientific method in his chosen profession, and social science, of economics. Dr. Smith expected to prove the inefficiencies of market mechanisms when he conducted his first economic experiments in 1956 at Purdue University, using his students as subjects. However, his experiments – testing economic concepts and theories under controlled conditions – instead overwhelmingly demonstrated to him the clear efficiencies of markets. Smith found that even with very little information and a modest number of participants, subjects converge rapidly to create a competitive equilibrium.

Specifically, Smith's experiments proved large numbers of perfectly informed economic agents were not prerequisites for market efficiency – a radical departure from conventional economic thought. Smith compiled his early experiments and in 1962, while a Visiting Professor at Stanford University, published his findings in the Journal of Political Economy. The article, "*An Experimental Study of Market Behavior*," is today considered the landmark paper on experimental economics.

Continuing his work, again at Purdue University, Smith conducted more and more experiments while also becoming well known as an expert in capital theory formation and an early pioneer in the field of environmental economics. Smith continued to research and teach experimental methods at Brown University, University of Massachusetts, University of Southern California, California Institute of Technology and the University of Arizona.

From Smith's foundation of research, the modern experimental methods in economics began to gain acceptance. The research expanded to include the economic performance of many real-world institutions. Attempts to apply laboratory experimental methods to policy problems became systematic. The convergence properties of multiple markets were discovered. Conspiracy, price controls and other types of market interventions were examined experimentally for the first time. New forms of markets were studied, such as methods for deciding on programs for public broadcasting. All this research stems from the initial contributions of Dr. Vernon Smith.

In 2001 Dr. Smith and six of his colleagues left the Economic Science Laboratory at the University of Arizona, founded by Dr. Smith, to form the Interdisciplinary Center for Experimental Science (ICES) at George Mason University, which Dr. Smith now directs. Current research is focused on the design and testing of markets for electric power, water and spectrum licenses.

In 2002 Smith received the Nobel Prize for Economics together with Daniel Kaneman.