

FRITZ MACHLUP: IN MEMORIAM

On January 30, 1983, in Princeton, New Jersey, Professor Fritz Machlup died of a heart attack shortly after his 80th birthday. With his death modern economics lost one of its most prominent, most productive, and most versatile scholars. For the present writer and for many, many others, Fritz Machlup was a close, affectionate, and trusted friend, whose memory will always be treasured. Machlup is survived by his wife Mitzi, his daughter Hannah Hastings, his son Stefan, and six grandchildren.

Machlup was born in Wiener-Neustadt, Austria, near Vienna, on December 15, 1902, and matriculated at the University of Vienna in 1920. Among his teachers were Friedrich von Wieser and Ludwig von Mises. Machlup received his doctorate (Doctor Rerum Politicarum) in 1923 upon completing his dissertation, "Die Goldkernwahrung" (Gold Bullion Standard), written under the direction of Ludwig von Mises. Publication of this work in 1925 marked the beginning of a great scientific and academic career.

During his time in Vienna, Machlup was also a businessman. While still a student, he became an active partner in his family's cardboard-producing concern. The company owned two factories, one in Austria and one in Hungary. In 1927, he became a member of the board of directors of a cartel of Austrian cardboard manufacturers. He often mentioned that his business experience was very helpful in his scientific work on monopolies, competition, and other areas. Machlup was also an economic journalist and a lecturer at the "Volkshochschule" (an evening college), but he never taught at the University of Vienna.

Early in 1933 Machlup came to the United States on a Rockefeller scholarship and visited Columbia, Harvard, and the University of Chicago. There he met leading economists, among them Joseph Schumpeter and Frank W. Taussig at Harvard and Frank H. Knight and Jacob Viner at Chicago. He also formed lasting friendships with Milton Friedman, George Stigler, and many other rising stars. In

May 1935 he received his first appointment as professor, from the University of Buffalo. While on leave during the first semester, Machlup liquidated his business interests in Austria. He spent several months at the London School of Economics and in Cambridge, England, before beginning his lectures in February 1936. In 1947 Machlup accepted a position at The Johns Hopkins University, after having served in the government for three and a half years during World War II. In 1960 Machlup was called to Princeton University to succeed Jacob Viner. In 1971, one year before his retirement from Princeton, Machlup began to teach regular courses at New York University. He received a professorship in economics from New York University in 1972, and continued teaching there until his death.

Machlup's scientific work is impressively vast and manifold. A complete bibliography, which appeared in 1976, lists 24 books written by him, 11 works with other authors, 62 lengthy essays, 108 shorter essays that appeared in leading periodicals, and over 200 contributions to newspapers, talks in panel discussions, book reviews, etc. Since 1976 nine more books and numerous articles have been added. Many of his works have been translated into foreign languages, including French, Italian, Japanese, Russian, Spanish, Swedish, and Serbo-Croatian.

The main area of Machlup's study was international currency problems, for which he became known in international banking and finance circles. He enriched the theory of the balance of payments adjustment (the theory of exchange rates, of international capital movements, and other financial transactions, etc.). He also provided solutions to the practical political problems of the reform of the international monetary system, which became acute in the 1960s when the dollar grew increasingly weaker.

The American Secretary of the Treasury Douglas Dillon announced in 1963 that a thorough investigation of the international monetary system was planned, but without the help of academic economists, who, Dillon thought, could never agree on anything. Thereupon Machlup organized a committee of professors, later known as the Bellagio Group, to prove that theoreticians were very well able to agree on certain principles. Later, experts from central banks and other nonacademic institutions participated in meetings of this group, which had a strong influence on the development of the international monetary system, especially on the transition from fixed to flexible exchange rates. The so-called Group of Thirty, under the leadership of Johannes Witteveen, is the successor of the Bellagio Group.

In 1967 Machlup was offered the presidency of the Austrian National

Bank, an indication of his outstanding reputation in the world of finance.

Machlup also made significant contributions in other areas: notably the methodology of the social sciences, microeconomics, and education and research as factors of production. Machlup's interest in methodology goes back to his time in Vienna. He was a close friend of the philosophers Felix Kaufmann and Alfred Schütz and had acquaintances among the members of the Vienna circle of positivists. His methodological writings are contained in the anthology *Essays on Economic Semantics* (first edition 1962, second edition 1977).

Machlup's writings on microeconomics address the theory of competition, of monopoly, and of intermediate forms. Much of his work on these topics is contained in two large volumes: *The Political Economy of Monopoly* (1952) and *The Economics of Sellers' Competition* (1952).

The results of Machlup's investigations into the economics of knowledge, a relatively new area of research, are found in *The Production and Distribution of Knowledge in the United States* (1962). In the 1970s Machlup began the preparation of a new edition of this work in 10 volumes entitled *Knowledge: Its Creation, Distribution, and Economic Significance*. In the preface he states that one volume could not do justice to the "knowledge explosion" of recent times. The first volume, *Knowledge and Knowledge Production*, appeared in 1980; the second volume, *The Branches of Knowledge*, in 1982. A third volume, *The Economics of Information and Human Capital*, is at the press.

Machlup was a passionate, inspiring, but strict teacher. He always had time for good students, despite his time-consuming research, writing, and other responsibilities. In addition to his academic work, he was president of the Southern Economic Association (1959), the American Economic Association (1966), and the International Economic Association (1971–1974). He was also an active member and president of the American Association of University Professors (1962–1964). Machlup received many honors, honorary doctorates, and gold medals from European and American universities.

With respect to politics and economics, Machlup was a firm liberal in the old, classical sense. With Friedrich von Hayek, Ludwig von Mises, and William Rappard he founded the Mont Pelerin Society.

To complete the picture of this important man, it should be mentioned that he was an avid sportsman—a good skier and fencer. At 79, he won two bronze medals in skiing competition with much younger men. A lover of classical music, he enjoyed in particular

Wagner's operas and Mahler's symphonies which he would listen to with score in hand.

Machlup was an excellent and sought-after speaker, discussion leader, and conversationalist. He undertook a lecture tour to India, Nepal, and Pakistan in his 79th year. Nine days before his death Machlup, seemingly in perfect health, performed for the last time with his usual verve and brilliance at the Cato Institute's conference, "In Search of Stable Money."

Kenneth Boulding composed the following verse, which describes the incredible tempo of Machlup's activities and thoughts:

Oh, happy is the man who sits
Beside or at the feet of Fritz,
Whose thoughts, as charming as profound,
Travel beyond the speeds of sound,
All passing as he speeds them up,
Mach 1, Mach 2, Mach 3, Machlup.
With what astonishment one sees
A supersonic Viennese
Whose wit and vigor, it appears,
Are undiminished by the years.

Gottfried Haberler