

becomes widely disseminated, the industry's technology becomes subject to continuous experimentation and improvement. During this stage, increases in output per unit of capital input become an increasingly important component of the growth in output per unit of total input.

Burton's hypothesis does appear to be consistent with the history of at least three industries with which I am relatively familiar—the meatpacking, dairy, and fertilizer industries.⁶

This still leaves unexplained why capital-saving innovation should appear simultaneously in broad sectors of the national economy. An attempt might be made to bridge this gap by tying the above hypotheses with respect to the sequence of labor- and capital-saving innovation into the description of the sequence of innovation contained in the Schumpeterian theory of economic growth.⁷ If Schumpeter's hypothesis with respect to long waves of inventive activity can be taken seriously, it seems likely that the first half of such a wave might well be characterized by a generally rising capital-output ratio and the second part by a generally declining capital-output ratio.

⁶ Vernon W. Ruttan, *Technological Progress in the Meatpacking Industry, 1919-1947* (Washington: Govt. Print. Off., January 1954). (U.S. Department of Agriculture Marketing Research Report No. 59); C. E. French, and T. C. Walz, "Impacts of Technological Developments on the Supply and Utilization of Milk," *Journal of Farm Economics*, December 1957, pp. 1159-70.

⁷ J. A. Schumpeter, "The Analyses of Economic Change," *Review of Economics and Statistics*, May 1935. Reprinted in American Economic Association, *Readings in Business Cycle Theory* (Philadelphia, 1944), pp. 1-19.