

drugs. These factors shelter the leading concerns, or any concern with a highly differentiated drug product, from effective price competition.⁶

This explanation of high drug profits is not novel. Nearly all researchers who have analyzed the drug industry in detail have come essentially to the same conclusion.⁷ Similarly, empirical studies which cut across many industries have identified the elements of market structure that are primarily responsible for high noncompetitive profits.⁸ These elements are high seller concentration, high barriers to entry, and product differentiation. One or more of these factors are present in the sale of all drugs where price competition is ineffective. Perhaps the most pervasive factor blocking effective price competition in drugs is the presence of substantial product differentiation of branded drug items. A recent econometric study demonstrates that advertising- and promotion-created barriers to entry are the single most important explanation for differences in profit rates in American industry.⁹ The drug industry was among the industries included in that study.

Professor Seymour Harris of Harvard University pretty well summarizes the conclusions of academic scholars concerning the organization and performance of the drug industry:

"Many are concerned that an industry which comes close to being a public utility achieves the highest profits in relation to sales and investment of any industry; is highly concentrated in its control of the market; reveals serious monopolistic trends; increases the cost to consumers by differentiating the product at a dizzy pace, with the differentiated product usually similar to or identical with existing products; and greatly inflates the cost through record expenditures on selling. The competition among companies to overwhelm the doctors by repetitious and often misleading advertising, and a failure to give as much publicity to the bad side effects as to the immediate beneficial effects, are unfortunate. Thus competition¹⁰ forces even highly moral firms to become less ethical in their behavior. In the drug industry the relation of labor to total costs is minimal; and like the soap and tobacco industries, using similar selling techniques, their relation of labor to value added is a minimum—selling expenditures and profits are the large items in gross receipts.

⁶ In a highly important study, Professor Hugh Douglas Walker of the University of Indiana measures the extent to which drug prices have been raised by the market power created by patents and brand advertising. He estimates that the gross benefits of the removal of both brand names and patents would amount to \$617 million per year. Since the removal of patent protection might have an adverse effect on research effort, he estimates that the net benefits to society after allowing an additional research subsidy of \$192 million (the total amount financed by industry in 1961) would be \$425 million. Professor Walker summarized his finding in a paper before the Econometrics Society meetings, December 29, 1967. His complete analysis appears in his unpublished doctoral dissertation, "Market Power and Price Levels in the Ethical Drug Industry," Vanderbilt University, June 1967.

⁷ Report No. 448 of the Committee on the Judiciary, U.S. Senate, made by its Subcommittee on Antitrust and Monopoly, 87th Cong., First Sess., *Study of Administered Prices in the Drug Industry*, June 27, 1961. Federal Trade Commission, *Economic Report on Antibiotics Manufacture*, June 1958. Leonard G. Schiffrin, "The Ethical Drug Industry: The Case for Compulsory Patent Licensing," *The Antitrust Bulletin*, Fall 1967, pp. 893-915. Henry Steele, "Patent Restrictions and Price Competition in the Ethical Drugs Industry," *Journal of Industrial Economics*, July 1964, pp. 198-223. Henry Steele, "Monopoly and Competition in the Ethical Drugs Market," *The Journal of Law & Economics*, October 1962, pp. 131-164. Seymour Harris, *The Economics of American Medicine*, 1964. William S. Comanor, "Research and Competition Product Differentiation in the Pharmaceutical Industry in the United States," *Economica*, November 1964; William S. Comanor, "Research and Technical Change in the Pharmaceutical Industry," *The Review of Economics and Statistics*, May 1965. Frank Cacciopaglia, Jr. and Howard B. Rockman, "The Proposed Drug Industry Antitrust Act—Patents, Pricing, and the Public," *The George Washington Law Review*, Vol. 30, June 1962, pp. 875-949. For a dissenting view see Jules Backman, "Economics of Proprietary Drugs," *Annals of the New York Academy of Sciences*, July 14, 1965.

⁸ See, for example, Joe S. Bain, "Relation of Profit Rate of Industry Concentration: American Manufacturing, 1936-40," *Quarterly Journal of Economics*, August 1951; Joe S. Bain, *Barriers to New Competition*, Harvard University Press, 1962; L. W. Weiss, "Average Concentration Ratios and Industrial Performance," *Journal of Industrial Economics*, July 1963. Norman R. Collins and Lee Preston, "Concentration and Price Margins in Food Manufacturing Industries," *The Journal of Industrial Economics*, July 1966, p. 226. A report by the staff of the Federal Trade Commission, *The Structure of Food Manufacturing*, Technical Study No. 8, National Commission on Food Marketing, June 1966, pp. 202-210. H. Michael Mann, "Seller Concentration, Barriers to Entry, and Rates of Return in Thirty Industries, 1950-1960," *Review of Economics and Statistics*, August 1966, pp. 296-307. Unpublished study by Norman R. Collins and Lee Preston, "Concentration and Price-Cost Margins in Manufacturing Industries," April 1, 1966. William S. Comanor and Thomas A. Wilson, "Advertising, Market Structure, and Market Performance," *Review of Economics and Statistics*, Nov. 1967.

⁹ William S. Comanor and Thomas A. Wilson, *ibid.*

¹⁰ Professor Harris is referring to nonprice rather than price competition.