accomplished by different firms merely assigning different brand names to identical substances and then advertising such brand names intensively; and (4) the presence of a very high degree of concentration in the production of most of the important ethical drugs, in the absence of any apparent economies of large-scale production.

An investigation of the production and marketing of ethical drugs compels the conclusion that the industry may easily be considered delinquent in regard to its impact on the allocation of economic resources. This paper will attempt to demonstrate that such misallocation of resources has been made possible by the existence and abuse of the patent privilege for ethical drug products and processes and by a number of measures which the industry has taken to foster and exploit the remarkable degree of imperfection of market information which the structure of the ethical drugs market permits. Such measures can, however, be understood adequately only in the context of actual drug marketing practices, which will be described below.

I. THE ECONOMIC FRAMEWORK OF THE ETHICAL DRUGS INDUSTRY

Broadly speaking, the economic framework within which the ethical drugs industry operates is conditioned by the nature of demand, the structure of costs, the existence of the patent privilege for drug products and processes, the eligibility of branded drug products for protection under the trademark laws, and the existence of the Food and Drug Administration's drug product inspection facilities as an external means of insuring quality in drug products.

The nature of demand is such as to distinguish the prescription drugs market from virtually all other markets.[3] Sole purchasing authority, as well as the necessary initiative, lies with the prescribing physician, who orders the specific drug for which the patient must pay. Chemically identical drugs may be selling under different names at widely varying prices, but the physician has no direct motivation to prescribe the lowest-priced brand or even to become aware of prices at all. (Indirectly he may reason that his fee for services may more readily be capable of collection if drug prices are low, but this would seem to be a distinctly secondary consideration.) Ideally, the total potential market for a drug or for a group of related drugs consists of the total need for medication (either for cure or for the relief of symptoms) on the part of all individuals afflicted by the various disease entities or clinical syndromes which are capable of treatment by the drug or group of drugs. Economically, total effective demand at given drug prices may fall short of total physical need in the case of individuals with very low incomes and no access to welfare case status, and it may exceed total physical need to the extent that individuals not suffering from those disorders for which the drugs are of use may nevertheless be treated with them. For any given drug, therefore, the actual relevant market is comprised of the total effective demand for medication on the part of all individuals who can be induced to consult physicians and who are afflicted by those disorders for which physicians may be inclined or persuaded to prescribe the particular drug.

Either for single drugs, or for a group of related drugs as a whole, the demand curve is likely to be extremely inelastic. It has been reported that individuals with severe inflammatory diseases and low incomes sometimes do without food in order to buy drugs.[4] Shifts in the demand curves for individual products are brought about by direct-mail advertising, medical journal advertising, and by the insistence of itinerant sailesmen or "detailmen," employed by the major drug firms. Advertising cannot manipulate the total incidence of diseases (although to a limited extent, news articles in newspapers and magazines may mention that a given drug can treat a given condition, and thus make more people who suffer, or imagine that they suffer, from a given condition, aware that drug treatment is available); but it can shift the existing effective demand from one product to another, and such shifts can perhaps be visualized as parallel rightward or left-

[3] Exception might be taken to this statement by college professors, who may be said to "prescribe" textbooks for their students. Here, however, the student has alternatives not open to drug buyers, such as the existence of a second-hand textbook market and the possibility of textbook sharing by two or more students.

[4] Testimony of E. D. Bransome of the Arthritis and Rheumatism Foundation. Hearings on Administered Prices before the Subcommittee on Antitrust and Monopoly of the Senate Comm. on the Judiciary, 86th Cong., 1st Sess., pt. 14, at 7992–93 (1960). (Hereinafter cited as "Hearings on Administered Prices.")