some period of time because purchase of medications at inflated prices had

usurped the entirety of their budgets.9

But one must first inquire into what sort of reforms might most appropriately be embodied in legislation to enhance the likelihood of price competition and lower prices in the drug industry. To do this requires a study of supply and demand in the drug industry—of drug costs in relationship to prices. What functions does the industry perform? Of what benefit are these functions? How efficiently does it perform them? Could any of these functions be more effectively performed under other auspices? An attempt is made to answer these and other questions in the next section.

II. AN ECONOMIC ANALYSIS OF SUPPLY AND DEMAND FOR PRESCRIPTION DRUGS

No economic analysis of the operations of a privately-owned industry is properly oriented unless primary attention is given to the operation of the profit motive in influencing the allocation of economic resources within the market. On this point, drug firm managements, investors, trade associations, and industry critics should find themselves in agreement. But while price competition presupposes mutually opposed interests on the part of separate competing firms striving to increase their share of the market, it also requires a pervading fundamental understanding that the institutons of the market—the price mechanism, for example, and the contractual arrangements of purchase and sale—shall be adhered to in a cooperative manner, such that the "rules of the game" exclude so-called "unfair" competitive tactics like the disparagement of a competitor's

goods, outright dishonesty in financial dealings, and the like.

One has not said much when he simply states that the relationship of supply and demand in a particular market determines the price charged, and the quantity bought and sold. One must also investigate the factors determining the supply and demand functions. Unfortunately, many of the determinants of these relationships are rather subtle and tend to elude quantification. Generally, speaking, supply is influenced by the costs of production, promotion, and distribution; by the arrangements in the terms of which production costs are allowed to influence pricing and production; by the channels of distribution employed; and by the legal provisions affecting the cost and availability of imports, the techniques of promotion, the ability of new products and new firms to enter the market, and the strategies available to sellers to temper competitive pressures. Demand is influenced by the severity of the patient's need for the drug, his ability to pay (either privately or through eligibility for public aid or reimbursement), and the degree to which sales promotion efforts succeed in capturing the attention of the physician in such a way as to influence him to prescribe a certain brand of drug.

A. An analysis of the factors influencing the supply of prescription drugs

1. Costs incurred by drug manufacturers

The major costs incurred by drug manufacturers may be categorized as follows: (1) basic research; (2) applied research; (3) product development; (4) manufacturing the active ingredient; (5) preparation of finished dosage forms; (6) sales promotion outlays. Each cost category may be best discussed by contrasting activities actually undertaken with those which would be appropriately in an

effectively competitive drug industry.

Basic research.—The drug industry has a distinct weakness for arguments to the effect that high drug prices are due chiefly to high research costs, that most of the research is basic in nature, and that high profits are necessary to finance these large research budgets. The argument is beginning to seem a bit anachronistic in view of the repeated demonstrations that the research budget is only a very small part of the sales dollar, being in the vicinity of 6 per cent. But there are further weaknesses in the argument. It is obvious that while high prices might be necessary to finance large research outlays, high profits are not. As has often been pointed out, profits are a residual after deducting all costs, including research costs. High profits indicate simply that a large part of the sales dollar was not accounted for by research costs—or any other costs. Furthermore, the majority of what is included under the category of "research" is something

⁹ E. D. Bransome of the Arthritis and Rheumatism Foundation, while fortunately having no mortalities to report, did state that some individuals with severe inflammatory diseases would go without food in order to be able to afford to buy drugs. Hearings on Administered Prices, Part 14, pp. 7992–7993.