## C. Product introduction

One prominent result of the extensive research effort of the industry is the market impact of the large volume of new items introduced annually. In any given year, most drug sales are likely to be accounted for by items introduced in the preceding five or six years. However, many products have a longer commercial life, and any decline in their share of total sales may be due as much to the acceleration of total sales through the introduction of new products as it is to their actual displacement by newer items. Nonetheless, market success is not an inevitable result of research and discovery or of new product development, and no more than a short life is assured to those products that are well received initially.

## D. Promotion and advertising

Just as a large part of the industry's research effort reflects its efforts to develop patentable specialties, much of its outlay for promotion and advertising reflects its efforts to establish trade-names as a basis for prescription writing. In the case of research, no doubt the conquering of illness and legitimate profit considerations are complementary factors. In the case of promotion and advertising, the important need for conveying technical information to physicians so that they may employ drug products with maximum effectiveness is a reason which complements profit considerations.

A number of factors in medical practice have rendered physicians increasingly dependent on producers as their major source of information. Among these factors are the proliferation of products containing new and older drugs; increasing specialization; increasing demands on doctors' time; the time-lag in the publication of journal articles; and the fact that most of the pre-introduction testing of new products and the continued testing of older products is done by or under the supervision of the drug firms themselves. All of these factors have contributed to the growth of the promotional element of selling costs.

The responsiveness of physicians to the use of trade-names is both result and cause of a large-scale advertising effort. As a consequence, advertising outlays have grown at a pace at least equal to promotion. Expenditures for advertising and promotion now account for roughly 25 percent of the sales dollar and one-third of total costs of production of large firms. Selling outlay ranks second only to the rather inclusive category "cost-of-goods-sold" as a cost component and is about four times greater than the research effort of which the industry is so proud. The advertising element alone is approximately twice that of research and development for the typical large firm. Few other industries compare closely with this in advertising effort relative to sales.

## E. Market concentration

Of the 700 firms in the industry, the twenty largest account for more than 90 percent of total sales, and another dozen or 15 account for half of the remainder. The high costs of research and development and of effective promotion of tradenames have set the large firms off from their many smaller rivals. The new products come almost entirely from these few large firms; in the markets for older products, the popularization of trade names has rendered the firms selling generically-designated items ineffective as competitors. Only in the production of products containing freely-available bulk drug ingredients (which are diminshing in relative economic importance) and in sales to those institutional buyers who purchase by generic designation can the many small firms participate. In all other market situations, the large firms dominate the picture.

This uneven division of shares of total industry sales between large and small firms is but one dimension of concentration. Concentration is an even more meaningful concept in individual product areas than it is for the industry as a whole, for it is this aspect of structure that conditions price policies and the nature and extent of market competition. Among the large firms there has emerged a pattern of specialization that tends to break them into smaller, rather exclusive groups, each group sharing a product area such as antibiotics, or steroid hormones with little fear of entry even by other large firms.

<sup>&</sup>lt;sup>6</sup> Promotion and advertising are interrelated activities, but separable in concept, function, and perhaps also in magnitude. Promotion, in essence, is the conveying of technical information about drug products that makes possible their use in therapy. Advertising is mainly directed at establishing and reminding physicians of the trade-names of company specialties. Estimates within the industry indicate that total selling outlays are divided roughly evenly between the two categories.