

2132 COMPETITIVE PROBLEMS IN THE DRUG INDUSTRY

has earned a return on common stockholders' equity over twice as high as the average for the drug companies and higher than even the most profitable of the drug companies in the sample.

The twenty-nine companies used in the sample include two firms which are not PMA members. One, McKesson & Robbins, is an associate. The other, Plough, is a manufacturer of proprietary products.

3. PERCENTAGE OF DRUGS PRODUCED BY COMPANIES IN RISK-RETURN STUDY (P. 2790)

Senator Nelson asked that information be supplied as to the percentage of drug products represented by the companies included in the Standard and Poor Compustat tapes on which was based the Arthur D. Little, Inc. study entitled "Risk and Return in American Industry" (p. 2790).

Of the 29 companies included in the Standard and Poor Compustat tapes, there are 26 which are members of PMA. These 26 firms account for about 70 percent of the ethical sales of United States firms, both here and abroad, according to PMA records.

4. SPATIAL VERSUS TEMPORAL VARIANCE AS A MEASURE OF UNCERTAINTY

In discussion of the Arthur D. Little, Inc. study entitled "Risk and Return in American Industry," Mr. Plotkin indicated that Arthur D. Little, Inc. would supply a memorandum explaining "why in economic terms the temporal variance... is not a good measure of uncertainty..." (p. 2794).

It is understood that Arthur D. Little, Inc. is separately submitting, for inclusion in the record, further material on aspects of its study which have been questioned during the hearings.

5. DETAILED FINANCIAL DATA PER PRODUCT (P. 2804-05)

Mr. Gordon requested, for each drug product cited by Professor Markham as made obsolete by a new product, that data be given on the following: the investment in the product, the amount recouped, the loss if any, the amount spent on research and development, and the effect obsolescence of the product had on profits of its manufacturer (p. 2805).

We have confirmed that for the reasons given by Professor Markham (pp. 2804-05), data on research and development expenditures on individual products, whether successful or unsuccessful, are not available.

However, research and development expenditures may be subdivided according to general therapeutic categories, as illustrated by the chart on the next page, reproduced from PMA's latest annual research and development survey.

To the extent that financial information of the kind requested is available as to particular products cited, such information is given in subsequent parts of this memorandum.

APPLIED RESEARCH AND DEVELOPMENT

In 1966, the most important applied research and development field was parasitic and infective diseases. In 1965, research for the discovery and development of drugs for central nervous system and sense organs had led all others in importance with 19.0 percent of all applied research and development funds. The 1966 ratio dropped to 16.2 percent.

Cardiovascular system drugs also showed a substantial gain. Also showing relative increases in 1966 over 1965 were research expenditures for dermatologicals and drugs acting on respiratory system. However, as in 1965 more than half of the applied research and development funds were directed toward the creation and development of drugs to be effective in three classes: (1) drugs affecting parasitic and infective diseases, (2) drugs for neoplasms, endocrine system and metabolic diseases, and (3) drugs for central nervous system and sense organs.