"The cost of drugs is too high. I say this, though I am aware that the research contributions of the industry are important and that the lives saved, the suffering averted, and the acceleration of recoveries are worth more than the \$4 billion spent on drugs. But the cost could be substantially less."

Does this mean that risk plays no role in high drug profits? Not necessarily. Although these high profits can be explained by the structural characteristics of the industry-high concentration, high entry barriers, and a high degree of product differentiation—it is conceivable that risk also played some part. Conrad, Plotkin, Markham and Cootner testified that they believed high drug prices and profits were due primarily to uniquely high risks assumed by large drug manufacturers, and that the Conrad-Plotkin study measured the magnitude of this risk. The relevant question, of course, is how much of total profits can be attributed to the risk factor. Let us therefore turn to the empirical evidence on this subject.

THE RELATIONSHIP BETWEEN RISK AND HIGH DRUG PROFITS

The investment analyst's view of the drug industry

One way of gaining insight into the question of "risk" is to look at what investment analysts tell investors about the drug industry. This may seem to be a rather homespun approach to the problem, but after all it is what investors believe about an industry that determines investment decisions.

A perusal of studies by investment analysts indicates that they generally advise investors that the drug industry is a rapid growth, high profit industry where established firms hold a strong position relative to small companies and potential entrants. The industry is frequently described as "depression resistant" because, as one analyst put it, "Illness is no respecter of business cycles, and Americans have shown that they will buy the medicine they need regardless of economic conditions." These characteristics are considered to make drug stocks good "defensive" investments. As a result, drug stocks sell at relatively high price-earnings ratios, indicating that investors are confident of a high future payout. A Standard & Poor's analysis of drugs summed up the factors affecting drug stocks as an investment as follows:

"Shares of drug equities have historically sold at relatively high price-earnings ratios, owing to the industry's recission-resistant characteristics, its aboveaverage earnings growth rate, and its strong underlying position. Moreover, it is difficult to enter the drug field." 13

Investment analysts generally emphasize that the high earnings of drug companies make drug stocks a good buy. This is not to imply, of course, that investment analysts view the industry as completely riskless. The staff of Moody's Investors Service, after explaining a number of reasons why drug stocks were a good investment, stated:

The drug industry cannot be risk-free. The postwar years have seen periods of slowdown, and individual companies have suffered temporary setbacks. The causes have been many. Competition has led to price-cutting in popular products, such as penicillin, where capacity has been overexpanded. Occasionally, a profitable new drug is found to have unsuspected and unfavorable side effects. This. however, is less of a problem than product obsolescence or the expiration of patents on major drugs that have been exclusive with one company. In recent years, government regulation has been tightened at the drugmakers' expense. Finally, the ebb and flow of respiratory diseases often causes sharp fluctuations in drug sales." 14

But after enumerating the above points, the Moody's analysts continued, "The impact of such development has caused only temporary deviations in a growth curve that has pointed strongly upward." ¹⁵ Thus, while the drug industry faces uncertainties and problems, from an investor's standpoint these "risks" apparently are no greater than those found in many other industries. On the contrary, drugs are considered a sound growth investment.

¹¹ Seymour Harris, The Economics of American Medicine, The MacMillan Company, 1964,

^{1.} Seymour Harris, The Bechanics of America of Moody's Investor Service for D. 6.
12 "No Cycle for Drugs," analysis prepared by the staff of Moody's Investor Service for Dun's Review, October 1967, p. 127.
13 Standard & Poor's Industry Surveys, Drugs, Cosmetics—Basic Analyses, May 4, 1967, p. D. 24.
14 "No Cycle for Drugs," analysis prepared by the staff of Moody's Investor Service for Dun's Review, October 1967, p. 127.
15 Ibid.