

(2) It is misleading to include the drug industry in a comparative study where a large number of industries are analyzed on the basis of measured average rates of return and variance, and conclusions are drawn as to the relative risks encountered by the groups of industries as a collection of observations. This is because the markets of the drug industry are so protected from price competition by patents, trademarks, extremely inelastic demand, brand name prescribing, the mediation of effective demand through a financially irresponsible purchasing agent, etc., that there is no other industry in which the seller has a comparably great power to rise superior to price competition. The drug industry is truly in a category by itself in this respect. Ideally, one should hold constant the degree of competition among industries in making a study of this sort. The relationship between risk and rate of return should be most clear cut if all industries studied were purely competitive. The value of the study is reduced to the extent that industries far removed from price competition are included. After all, a pure monopolist could conceivably earn enormous returns with no risk.

(3) It is difficult to understand why the investor is conceived of as measuring risk in terms of variance alone, without regard to the average rate of return in the industry. It seems likely that an investor will regard two industries as having different risks, if one has an average rate of return of 25 percent and the other has an average return of 5 percent, even though each has a variance of 50, for example.

B. Specific criticisms

(1) On page 11, the authors state: "It is within the individual corporation that the balance between expected returns and expected risks is struck." This is contrary to the approach taken in economic theory and in financial analysis, where the basic unit is the individual investment project, not the firm as a whole. The firm is a collection of projects, some of which may be very risky while some are not.

(2) On page 14, the authors admit that they were unable to allow for possible biases resulting from the fact that their data source limited them to the larger and more successful firms in each industry. This might be the source of considerable difficulty. It is generally known that larger firms make higher profits than smaller firms, both as a general rule and within the typical industry. Hence if an industry composed of 50 medium sized firms is compared with one made up of 25 large firms and 25 small firms, the variance and hence the riskiness of the latter is likely to be greater, although it is debatable if this is in fact the case. And limitation of data to the larger firms tend to underestimate the risks faced in a given industry. The fact that the firm is a collection of investment projects provides an additional reason why the larger firm may be able to make a higher rate of return than the small firm. Not only is it able to take advantage of economies of large-scale production, transportation, distribution, advertising, and finance, but it can also adopt a broader scale risk diversification program which makes it less vulnerable to the possibly unfavorable outcomes of individual projects. Hence the industries containing the largest firms may actually face the smallest risks, and yet their rate of return on investment will be relatively higher.