

typical firm would suffer should one of these potential risks materialize. There may be several approaches to answering this question, but the one we are pursuing involves the measurement of the extent to which the major pharmaceutical firms' revenues and profits are concentrated in relatively few product lines. The logic underlying our particular approach is quite simple. If the typical firm sells numerous pharmaceutical products, no one of which accounts for more than a small fraction of total sales, the above risks may not be significantly larger than the usual risks American business firms encounter in their day-to-day operations. The materialization of any one of these risks would simply mean that a relatively small share of a firm's profits and revenues would very likely evaporate—an event that almost any business firm, confronting average risks, might experience, and expect to experience, in a dynamic economy such as ours. On the other hand, if profits and revenues are highly concentrated in two or three product lines the potential loss from the materialization of any one of the enumerated risks might be quite substantial. The potential collapse of a single product's sales accounting for a large percentage of a firm's profits is obviously a much more serious risk than the collapse of the sales of a product accounting for a very small fraction of a firm's profits. Such a potential situation becomes even more uncertain and risky in the case of the pharmaceutical firms when account is taken of what they may have in prospect after the possible collapse of a major product. The types of collapse we refer to do not offer hope, in most cases, of subsequent recovery of the product's market position.

Senator NELSON. Do you have some examples of cases where there has been such a product collapse and the company has not made a substantial recovery?

Dr. MARKHAM. Oh, yes, we have numerous products.

Senator NELSON. I mean companies.

Dr. MARKHAM. No, we are not saying that a company collapses, although I think perhaps there may be data on that, too. I am saying that a firm's product line, if indeed it does turn out that product lines can evaporate and do evaporate, then the mere fact that a large percentage of the firm's sales or profits is concentrated in relatively few product lines makes that potential risk much more of a risk than if you produce, say, a hundred products and 1 percent of your profits were just undercut by the introduction of a product.

As I have said, that may be a normal risk that any business firm encounters.

Senator NELSON. Well, I certainly appreciate that you have a risk here but the likelihood of it happening and having serious consequences does not seem to be too great.

Mr. CUTLER. As an example, you might look at the Cutter Laboratory figure on page 50 of the risk and return tables. Cutter's problem with its polio vaccine developed seriously in 1955 and now, in these 1965 figures, 10 years later, had not reached the rate of return which it had enjoyed before that particular event occurred. So in 10 years Cutter has not yet fully recovered from the effect of this particular incident relating to its polio vaccine.

Senator NELSON. But if you backed up to the year 1952 you would see that in the year 1965, they are approaching four times the 1952 earnings.