

So that is why I answered your question as I did, that it is true, one can posit situations under which the situations would break down. Whether there is such gain in such positing depends on how relevant both situations are to the real world.

We submit not through judgment or opinion, but through analysis, they do not represent real world situations and do not affect the validity of the results.

Senator NELSON. Risk is a relative thing, is it not?

Mr. PLOTKIN. We say the risk/return relationship is relative, one industry versus another. It is not an absolute quantification, but it is a measure such that when it is higher, the risk of investing in that industry is higher than the risk of investing in an industry when that is lower. It does not say that it is worth \$10 or \$20, or something like that.

Senator NELSON. But you could project your chart which now covers 16 years to 50 years, and if you came out with exactly the same result, would you come to exactly the same conclusions?

Mr. PLOTKIN. I would, sir, because what the chart seeks to do, does not matter as long as you have some minimal number of years so you are certain that it is not a perturbation that you are measuring, the chart seeks to look at the ex ante, if I may use the technical word, the risk that appears to a person before he takes the plunge, he makes that decision based on past information.

Let us see where is the relevance. Before a drug company president can commit capital to research and developing a bioactive agent, he must ask himself whether that is the most profitable use of his capital for the risks involved in that venture. He repeatedly asks himself that question, or would he be better investing in IBM stock, buying the telephone company, or, as some of our insurance companies have come to conclude, buying out credit card companies, rather than investing in insurance.

If he feels that the prospective risks of the individual ventures are not justified by their rate of return, he will not commit capital to those ventures.

This analysis addresses itself to quantifying the prospective risks based on the simple hypotheses, given those two ventures, which one is more risky, which one is more uncertain. This is not a complete theory of profitability. It is not—I would be both naive and boastful to claim that I have quantified here the entire American economy.

I have taken two important dimensions of it and shown its relationship. It is based not on mathematical concepts that a businessman would not be operating under such as—

Senator NELSON. Of course, when he is making that decision as to where to put his capital, he may very well put it into a company in which the profit is lower than it is in his own business, perhaps for purposes of diversification, or he may do it for a tax loss. He may do it for any number of reasons—noneconomic reasons.

Mr. PLOTKIN. The reason you mentioned yourself, the diversification, diversification is the other side of the coin of risk. It is a way of getting away from risk.

Now, what we have to do here is isolate the risk of the particular industry, the drug industry, to see whether capital will flow into there