If economics has made any progress in the last 20 years, it is our ability to take things out of the field of judgment, out of the field of authority and whose textbook you read, and into objective, verifiable, repeatable experiments.

Senator NELSON. The first students of aerodynamics came to the conclusion that the bumble bee could not fly because in proportion to the body the wing size was not big enough. But he flies pretty well.

You used 29 companies to represent the drug industry?

Mr. PLOTKIN. Twenty-nine companies.

Senator NELSON. How many of these companies have lost money in this period; is it 17 years?

Mr. PLOTKIN. Sixteen years, sir.

Senator NELSON. In the 16 years that you used, did any one of those 29 companies have a loss year?

Mr. PLOTKIN. Yes. The answer is yes. These facts are in the report.

May I once again—I submit that we do have a rather subtle division of labor, but I think that the committee benefits by the expertise of this division.

Mr. Conrad, of the Arthur D. Little organization, is primarily in charge of the relevant information with respect to the pharmaceutical industry, which firms were comprised in it, how it reflects on it, and how his additional studies, together with those of Professor Markham, go to say why this point is to be expected, why the risk should be high; and I would respectfully ask that these questions be deferred and be integrated into his testimony.

Here I am just prepared, at this point, without any expertise other than a personal opinion which I have eschewed, discussed the general validity of such measurement.

Mr. GORDON. Mr. Plotkin——

Mr. PLOTKIN. Yes, sir.

Mr. GORDON (continuing). In the study that you have presented to the committee on the proposed theory of risk and return, on page 12 you say:

> In order to perform these statistical tests, it was necessary to construct a quantitative measure of the industry risk (or uncertainty). We selected measures of the dispersion of individual companies' rates of return about their industry's average rate of return for a given year.

Mr. PLOTKIN. That is correct. It is so worded.

Mr. GORDON. Now, it seems to follow from your definition that if there were two industries—let us take two industries, A and B, each with two firms, A–1 and A–2, B–1 and B–2. Now, A–1 earned 25 percent on its investment, or its assets, after taxes.

A–2 earned 15 percent on its investment, on its assets, after taxes. B–1 earned 9 percent. B–2 earned 7 percent. Maybe you ought to write that down.

Mr. PLOTKIN. Fifteen, twenty-five, seven, nine.

Mr. GORDON. A–1 earns 25 percent, A–2 earned 15 percent, B–1 earned 9 percent, B–2 earned 7 percent.

Now then, industry A, according to your definition, would be the high-risk industry; is that not correct?

Mr. PLOTKIN. That is not correct, because you would have to further hypothesize that this was the case year-in and year-out, and also——

Mr. GORDON. All right. Let us take it on a year-in and year-out basis.