

Mr. PLOTKIN. This is a reproduction of the chart which appears on page 19 of the report you have on hand. It has a striking similarity to the chart for market value. You have this upward sloping relationship. Higher rates of return are associated with higher risks in fact, not in hypothesis, and not because it is a necessary mathematical relation, but because it seems to be a validation of an economic truth.

This is, in essence—you asked me before about the econometric society—this is in essence what an econometrician does, takes a hypothesis where he has an expectation of a certain relationship, goes to the real world, measures the data and tries to determine whether or not that is a valid hypothesis. This is an upward sloping relationship with a good fit, the dots are for this purpose tightly clustered around the line, tightly relative to normal statistical tests to which this relationship has been exposed.

Senator NELSON. This chart is through 1965?

Mr. PLOTKIN. Through 1965; 1950 through 1965, each point represents one industry, an average of over 15 companies per industry, but this number varied because some industries were smaller and some larger. So there are 783 companies, 59 industries, for 16 years.

Senator NELSON. How many companies did you use in the red dot, in the drug industry?

Mr. CONRAD. Twenty-nine.

Mr. PLOTKIN. Twenty-nine, as classified by the Standard & Poor Corp. It included Gillette with its fantastic return on total assets, of about 30 to 40 percent.

We included precisely all those companies included by Standard & Poor's in every industrial classification.

Senator NELSON. Is my eye correct—is the red dot representing the industry with the third highest rate of return on that chart, or the second?

Mr. PLOTKIN. It is the fourth highest in risk, and it is the third highest in rate of return.

Senator NELSON. If it were brought up to date for this year then, would not the drug industry be first on rate of return?

Mr. PLOTKIN. No, sir. I realize what the FTC report said, but that only puts in 1 more year, so it would then be a 17-year study.

Senator NELSON. This is for a period?

Mr. PLOTKIN. This is for the 16-year period. It is unfair to ask a statistical test to establish a relationship based on just 1 year's observation. That is why before one can have confidence in an econometric analysis, it must be very rich in data drawn on many years' observations, so as not to be unduly influenced—

Senator NELSON. This past year's return would just raise it, but you do not know by how much?

Mr. PLOTKIN. It would just raise it, but I can tell you that its effect, this return is about 3 percentage points greater than its 16-year average, and would count one seventeenth of 3 percent—perhaps Professor Cootner can help to figure out mental arithmetic here.

Senator NELSON. I cannot tell what the difference, percentagewise, between the three which are above it is, so I do not know how much it would change it. Would it change its position at all?

Mr. PLOTKIN. It would change it, but not perceptibly.