exhaustive—history of those drugs which have been superior to one of a company's major products and caused virtually complete replacement in a short time. These are the conditions given in your statement.

Dr. MARKHAM. Well, one slight modification to that "causes virtually complete replacement." I am aware of the fact that many drugs that lose their commercial position for the firm are still held on. They appear among the drugs that are offered for sale.

The point that I am trying to go into here is that this is an industry in which you get rapid product innovation. I do not think anyone denies this.

Mr. GORDON. Dr. Markham, we are talking about this particular one risk that you have mentioned as risk No. 1.

Now, in addition to the exhaustive list which I hope you will supply us with, as the chairman suggested, that you will supply us with the investment for that particular product which has been made obsolete; what the investment for that particular product recouped; how much money was lost, if any; how much money was spent on research and development by the firm for the product; as the chairman asked you, what happened to the profits as a percentage of net worth or on investment of the firm; whose work was made obsolete.

Dr. MARKHAM. I think that last we can give you.[1] I acknowledge the relevance of what you are asking for. I think I can categorically state for you you can never get that information. The amount that is spent on research and development on a particular product is philosophically impossible to determine as well as from an accounting point of view impossible. The number of times you make an experiment and you come back with the answer no, for example, the number of compounds that you test and find that they are of no immediate therapeutic value, are nevertheless a part of the research and development cost that in a sense should be charged to some of the successful products. I do not think that any set of books will reveal for you or to me in the terms that I would like to have them all of the investment, including research and development, technical research and development, including clinical testing and all the other costs that go—I just do not believe that you will find, in other words, profit-and-loss statement by product line. The companies have at least convinced me they do not have these data. I am going to, in a moment, come to some possible estimates that might be relevant to this point, but you are just not going to get those data and I do not think—I would be less than honest if I said I would try to get them, implying that I could get them for you.

Mr. GORDON. In my opinion, Dr. Markham, that is very essential data, because a drug can be made obsolete after the company has made a considerable amount of money on it, even after its investment has been recovered. I would not call that a risk.

Dr. MARKHAM. I think you would concede—let us take this last set of data you asked for. If he can show, for example, that a particular product by a rival, contributed to the effect, I think you would take this, although it is not specific data, as meaning it would have at least an impact on the drug company's revenues.

Senator NELSON. That is true, but you are using a 17-year period to test the risk of your company. These companies are all in the same

[1] See Appendix III beginning at p. 2129, infra.