Chairman Proxmire. It is just too low, obviously. It may be that we are forgetting some of the benefits here or overstating the costs. But if you have a calculation which includes the costs-

Mr. Enthoven. Yes, sir.

Chairman Proxmire (continuing). And includes the benefits, all the benefits, then it seems to me very hard to justify going much lower than, as you say 8 to 10 percent; 7 percent anyway. It does not mean you do not go ahead even though you have a benefit-cost ratio of less than unity, but at least you go ahead with your eyes open. You know

what you are doing.

Mr. Enthoven. I agree, Mr. Chairman. I do not think that a department should be allowed to use an unrealistically low rate on the basis of alleged nonquantifiable benefits. It would be better to use a realistic rate and then to define, describe, and defend the nonquantifiable benefits, and present them for the judgment of responsible officials in the executive and legislative branches.

Chairman Proxmire. Mr. Lynn, how would you—or would you describe for the committee the procedures by which the Government analysts can make explicit allowances for risk and uncertainty in the

benefit-cost streams?

Mr. Lynn. I think it is important to distinguish between the concepts of risk and uncertainty.

Chairman Proxmire. All right.

Mr. Lynn. Various programs may be subject to foreseeable kinds of risks; such as, that the costs will be somewhat higher or somewhat lower than we estimate, or that the particular performance characteristics will vary somewhat about the expected values that we have set for them.

Chairman Proxmire. That is the uncertainty aspect.

Mr. Lynn. That would be what I would consider the risk aspect; that is, we can define probabilities for various of these different states occurring and perhaps develop formal distributions of both the cost estimates and the performance estimates.

On the other hand, there are other kinds of uncertainties, for example, that the requirements may be very different than we estimate or that the system may not work at all, or that the whole environment within which we are looking at our problem may change in some major way. I do not think there is any way to fold such uncertainties into a discount rate adjustment. I think the best thing to do with those kinds of situations is to analyze cost and effectiveness under different circumstances, and then make judgments on the basis of alternative possible outcomes, rather than trying to subsume every consideration in the discount rate.

Chairman Proxmire. So that you would stick with the discount rate we have been discussing rather than vary the discount rate depending on the risk and uncertainty involved, and you would try to provide for

the risk and uncertainty in the benefits?

Mr. Lynn. Well, both the analytical and the practical problems of

handling risk are very subtle.

Chairman Proxmire. I think from the political standpoint, that a consistent rate would be much more desirable. If you can get a rate and apply it for everybody, you are in much better shape, it would seem to me, than if you get a rate that varies all over the place.