discount rate itself, without making a separate risk allowance for each project or program. A third and still better, approach would be to try to identify especially risky Government investments, investments of medium risk, and investments of demonstrably low risk and to make separate risk adjustments for each of these three categories. If we could simply identify investments in those three classes and have a higher than average discount rate for those that bear the earmarks of being highly speculative and a lower than average discount rate for those of types with assured histories of proven payoffs, we would be doing a decent job, although obviously not the best conceivable job.

Chairman PROXMIRE. Dr. Eckstein, how would you handle this?

Mr. ECKSTEIN. I do not think you can put it all into the interest rate. If you think of investments in technologies, which after all, are a good deal of Government expenditure these days, there you ought to be very conservative, so you ought to assume a short economic life or be conservative in other aspects of the computation. I do not think you can put all of that—you ought to insist on a high interest rate as any reasonable enterprise would.

If you look at human investments, evaluating Headstart if you could do it by this method, that kind of program, which have, on the other hand, a lifetime payoff, again I do not see how you can weigh risk properly by putting in the interest rate.

We know these are high risk investments. We know there are great social rewards, savings in social cost later on. I do not see how you can—I do not think it makes any sense even in these areas to put in an arbitrarily low interest rate which is just an arbitrary way of muddling the computation. You ought to use a rate of the sort we have been talking about even in those areas, but I would not——

Chairman PROXMIRE. If you do not do it with the interest rate, how do you arrive at risk? Usually we do adjust the risk through interest rate. This is——

Mr. ECKSTEIN. Let us take Job Corps, which is not the most difficult of these to evaluate. The benefit of Job Corps is the expected increase in lifetime income of the trainees compared to the income they would have gotten if they had not gone to Job Corps.

There is a probabilistic matter and the analysis as conducted is probabilistic. Some percentage of these youngsters will get better jobs. Some percentage will not. Some percentage will drop out in the first few months with no visible benefit.

I would put the risk adjustment conservatively into a realistic assessment of these probabilities and a realistic assessment of the increases of income—things of that sort.

In the water area, and the general hardware area, roads, things of that sort, I think you can use a risk premium approach. If you start out with a pure interest rate, something like the Government bond rate, then you ought to add a percent or two because that is what you would be earning in the private sector for that kind of investment. That is the risk premium that prevails in the telephone company, the electric power companies. That is the kind of investment it is.

Chairman PROXMIRE. You say in your statement, Dr. Eckstein, the Soviet Republic, U.S.S.R., now uses a 10-percent discount by and large.

Mr. ECKSTEIN. Yes.