Harberger, of the University of Chicago. Both of these gentlemen are prominent in the area of public expenditure economics and should contribute substantially to our understanding of this matter.

Tomorrow, we will hear the testimony of representatives of three Federal agencies on the status of interest rate and discounting procedures in their agencies.

Dr. Eckstein, we will be happy to have you go ahead.

STATEMENT OF OTTO ECKSTEIN, PROFESSOR OF ECONOMICS, HARVARD UNIVERSITY

Mr. Eckstein. Thank you, Mr. Chairman. It is always a pleasure to me to work with the Joint Economic Committee and to continue my long association.

INTEREST RATE POLICY FOR THE EVALUATION OF FEDERAL PROGRAMS

These hearings of the Subcommittee on Economy in Government of the Joint Economic Committee are a milestone in Federal expenditure policy. Government investment in physical and human capital has increased enormously in the last 30 years, and the crisis in our cities makes a dramatic further growth of public investment very likely. If these investments are to be productive in accomplishing our national purposes they must be well planned, employing sensible economic prin-

ciples and meaningful tests of performance.

Although it appears to be an abstract and highly technical matter, the choice of interest rate in planning is fundamental and important. The history of many economies, including our own, is replete with capital projects based on faulty interest rates, with disastrous results and enormous waste. Perhaps the most extreme example was the attempt by the Soviet Union to plan an industrialization process without the use of any interest rate—an absurd undertaking saved only by the ingenuity of technicians in introducing interest-like criteria under other names. Under Joseph Stalin the use of zero interest rates helped produce the worst of gigantism. Projects of enormous scale and capital intensity were started in the various regions of the Soviet Union. Because of their size and capital intensity, years went by with little payoff from these slowly progressing monuments. Even after their completion their returns were often modest. After Stalin's death, as the aspirations of the Russian people have begun to make themselves felt, his successors have sought a higher degree of rationality in economic calculations, and among other things have encouraged more systematic testing of capital investments in terms of their rate of return. Even for large investments a rate as high as 10 percent is prescribed today, and for less capital intensive projects the rates are higher.

Another interesting example can be found in the United Kingdom.

Another interesting example can be found in the United Kingdom. Its premature investment in atomic energy for electric power reportedly can partly be blamed on the Government's use of a low interest rate in planning at a time in the early 1950's when capital was scarce.

In the United States the larger part of physical investment has been in private hands. While the actual capital market bears no more than a family resemblance to the perfect allocating mechanism of economic theory, it still provides a vital discipline to investment decisions to avoid the very grossest errors.