

DETERMINATION OF DISCOUNT RATE TO BE USED

The single, most important assumption made, in our view, was that the estimated costs should be discounted at a rate of $5\frac{1}{8}$ percent, representing the estimated costs of Government borrowings.

This Office has issued a report,¹ a copy of which is enclosed, on an earlier survey of the use by 23 selected Federal agencies of the technique of discounting in making evaluations of future programs. In that report we indicated that, with respect to the determination of the discount rate to be used under the discounting technique, one school of thought holds that such rate should be determined by, and be equal to, the rate paid by the Treasury Department in borrowing money. Another school of thought holds that the rate should be determined by what is foregone in the economy, namely, the return that could have been earned in the private sector of the economy, when the decision is made to commit resources to the public sector. Still another view, as indicated in that report, is that the rate should be the total of the interest cost to the Government and the cost of taxes forgone by the Government when resources are withdrawn from the private sector to use for Government programs.

Under the second and third views stated above, it appears that the discount rate to be used for determining the total cost to the Government would be higher than $5\frac{1}{8}$ percent and that a discount rate from 7 to 8 percent could be demonstrated.

With regard to the view that the rate should be determined by the return that could have been earned in the public sector of the economy, we noted that, in its report² relative to the question of the discount rate which should be used in evaluating public programs, the Joint Economic Committee, Congress of the United States, stated:

"According to the testimony received by the subcommittee, economists generally agree that the appropriate discount rate to use in evaluating public programs is the opportunity cost of capital in the private sector. * * * The witnesses generally agreed, however, that the opportunity cost of capital in the private sector is at least 10 percent at the present time."

Proponents of all views agree that the use of different discount rates has an effect on financial judgments.

Because of the divergence of opinion at this time with respect to the discount rate that should be used and the effect that the use of different discount rates would have on the estimated costs of a program, we have calculated the cost of the direct and insured loan programs using discount rates of 7 percent and 10 percent. Our calculations were made both with and without provisions for cancellation costs, because of the initial request by the Subcommittee Chairman that the cost comparison made by the Treasury be made in such a manner. Our calculations at the discount rates of 7 percent and 10 percent and a calculation at the $5\frac{1}{8}$ -percent discount rate used in the Treasury Department's cost comparison follow.

COMPARISON OF RELATIVE FEDERAL GOVERNMENT COSTS FOR THE DIRECT AND INSURED LOAN PROGRAMS AT VARYING DISCOUNT RATES WITH AND WITHOUT CANCELLATION COSTS

Discount rate (percent).....	Direct loan program without cancellation costs			Direct loan program with cancellation costs		
	$5\frac{1}{8}$	7	10	$5\frac{1}{8}$	7	10
Federal capital contribution.....	\$534,808	\$657,591	\$799,713	\$720,968	\$818,905	\$928,628
Interest receipts, deduct.....	-185,478	-160,967	-128,945	-142,567	-123,275	-98,211
Payments for institutions' administrative cost.....	115,064	103,876	88,816	114,410	103,356	88,446
Principal canceled (10 percent paid to schools).....				20,883	18,128	14,503
Total cost.....	464,394	600,500	759,584	713,694	817,114	933,366

¹ See report to Joint Economic Committee, Congress of the United States, entitled "Survey of Use by Federal Agencies of the Discounting Technique in Evaluating Future Programs," B-162719, dated January 29, 1968.

² Report of the Subcommittee on Economy in Government, Joint Economic Committee, Congress of the United States, December 4, 1967.