THE SIMPLEST MODEL FOR DETERMINING THE DISCOUNT RATE

In the simplest model of our economy there is only one rate of interest facing lenders and borrowers and governing the rate of investment in productive capital. The effect of an increase in the rate is not only to make it undesirable to engage in some investment projects or to reduce the total level of investment but also to change the character of those projects adopted, making them less capital intensive and more labor intensive. In this simplest model, and given the objective of maximizing gross national product, the Government, too, would apply this rate to evaluating future as opposed to present benefits and costs. It is widely accepted among economists that this model is inadequate because it oversimplifies our economy. However, there is less unanimity as to the extent and the way in which this model should be modified to reflect reality for public policy purposes.

An important limitation on the applicability of the model is the existence of market imperfections both with respect to restrictions on entry of capital into given fields of economic activity and with respect to the information available to investors and savers. Another equally important limitation is the existence of risk and uncertainty—the likelihood of realizing the benefits. As a result of these departures from the simplest model, we find consumers borrowing at much higher rates than they receive on their savings and substantial variations in the rate of return on different types of securities and in different industries. Moreover, the possibility of changes in price levels is also reflected in the market rates of return on saving and investment.

THE DISCOUNT RATE AS DETERMINED BY PRIVATE RETURNS FOREGONE

In the face of this more complicated view of private investment decisions, it is possible to distinguish several alternative conceptual bases for the determination of a discount rate to be used by the Government for the evaluation of investments. The simplest position holds that the appropriate rate is the average rate of return in private industry on investments in productive capital assets, before corporate income taxes. This position is justified on the grounds that the opportunity cost of a dollar of public spending is its productivity in private investment. Unless, therefore, each dollar of public investment yields at least the rate of return in private industry, GNP could be increased, it is argued, by reducing taxes or borrowing and spending and letting private investment increase.

A more complex position, but one with the same basic rationale, would reflect not only the rate of return on productive investment in private industry, but would make allowance for the rates received and paid by various classes of consumers. The relative influence of each component on the average is to be determined by the extent to which additional Federal taxation or borrowing displaces private investment or consumption. This approach can be quite detailed to take account of the incidence of the increase in taxation on various classes of consumers and investors who face different rates as a result of market imperfections. This concept, like the preceding one, is basically an opportunity cost concept.

THE DISCOUNT RATE AS A REFLECTION OF SOCIAL OBJECTIVES

A third concept is a more radical departure. In this approach, the judgment of the private market is not accepted as the final arbiter of the appropriate discount rate for Government programs: instead the discount rate is viewed as a tool for expressing and carrying out distinctively public objectives. Therefore, it is argued, the discount rate should be affected by, but need not be identical with the rate reflecting private opportunities foregone. A form of this position commonly advanced is the argument that the market rate or complex of rates does not permit future generations to express their preference in the market place and that the Government should act as the guardian of their interests, presumably by using a lower than market rate and thereby producing a shift of income into the future. It might also be argued that the Government should value growth for its own sake, apart from the additional income generated, because the viability and vitality of a democratic society are increased by creating more opportunities for upward mobility and change. It is always easier to make desirable changes when growth permits reallocations in which everyone benefits—even if unequally—than when reallocation means taking from one person to give to another.