model the social cost can easily be imputed. An analysis based upon the competitive model would go like this: The cost of capital is measured by the interest rate. Insofar as the necessary taxes reduce marginal investments of firms, they prevent the creation of a stream of returns whose relationship to the foregone investment would have been just equal to the interest rate. Similarly, taxes which fall on consumption reduce the present levels of consumption for which people are willing to pass up the opportunity of collecting the market rate of interest. In other words, the consumer places the same value on the expenditure of the marginal consumption dollar as on a perpetual income stream equal to the interest rate. Thus, if government desires to place an economic value on the cost of raising capital through taxation, it can simply apply the market rate of interest.[2]

Unfortunately, the American economy does not fit the competitive model closely enough to permit use of so simple a procedure. The substantial risk premiums in the terms on which business can borrow, and the rationing of credit to some businesses and to most consumers, preclude the existence of a unique rate of interest and prevent consideration of any single actual rate as a measure of the social cost of capital. Yet, in considering alternative methods of financing water resource development and in evaluating the economic worth of projects, reasonable estimates of the social cost of federal funds are essential. Since the market cannot be consulted for the price of capital, as competitive theory would suggest, it is necessary to derive an estimate by more complicated empirical procedures which take account of some of the complexities of the process by which savings are actually channeled into investment.

That is the task undertaken in this chapter. First, as background for our inquiry, we shall examine the salient facts about saving and borrowing in the United States in a recent year. Then, through the use of models, we shall attempt to derive a figure that can serve as a measure of the social cost of public funds used in development of water resources.

[2] This assumes that the taxes are raised without causing any distortion in decision-making. If there are tax-induced distortions in the economy's allocation of resources, the true social cost of raising capital by taxation will be greater than the market rate of interest.