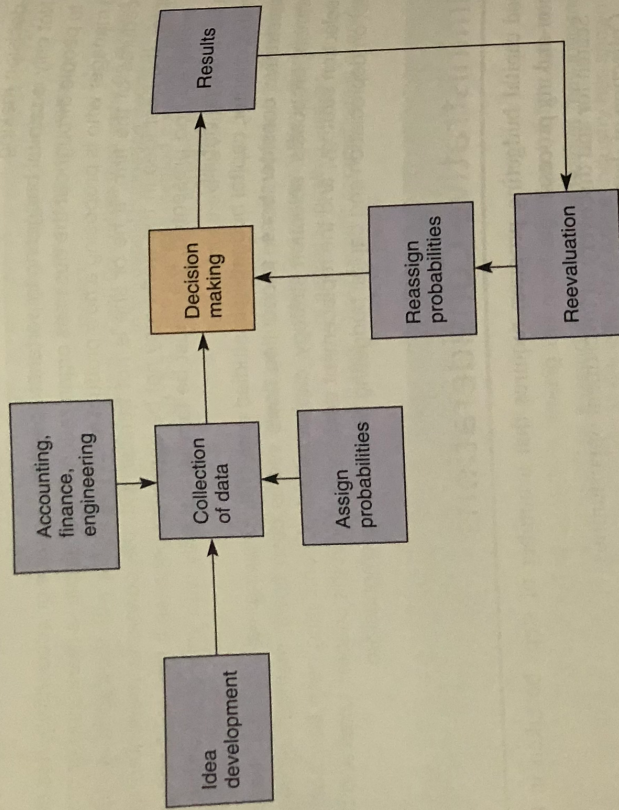


Figure 12-1 Capital budgeting procedures

generated.¹ Assume the Alston Corporation has \$50,000 of new equipment to be depreciated at \$5,000 per year. The firm has \$20,000 in earnings before depreciation and taxes and pays 35 percent in taxes. The information is presented in Table 12-1 to illustrate the key points involved.

The firm shows \$9,750 in earnings after taxes, but it adds back the noncash deduction of \$5,000 in depreciation to arrive at a cash flow figure of \$14,750. The logic of

Table 12-1 Cash flow for Alston Corporation

Earnings before depreciation and taxes (cash inflow)	\$20,000
Depreciation (noncash expense)	5,000
Earnings before taxes	\$15,000
Taxes (cash outflow)	5,250
Earnings after taxes	\$ 9,750
Depreciation	+5,000
Cash flow	\$14,750

¹As explained in Chapter 2, depreciation is not a new source of funds (except in tax savings) but represents a noncash outlay to be added back.

adding back depreciation becomes even greater if we consider the impact of \$20,000 in depreciation for the Alston Corp. (Table 12-2). Net earnings before and after taxes are zero, but the company has \$20,000 cash in the bank.

Table 12-2 Revised cash flow for Alston Corporation

Earnings before depreciation and taxes	\$20,000
Depreciation	20,000
Earnings before taxes	\$ 0
Taxes	0
Earnings after taxes	\$ 0
Depreciation	20,000
Cash flow	\$20,000

To the capital budgeting specialist, the use of cash flow figures is well accepted. However, top management does not always take a similar viewpoint. Assume you are the president of a firm listed on the New York Stock Exchange and must select between two alternatives. Proposal A will provide zero in aftertax earnings and \$100,000 in cash flow, while Proposal B, calling for no depreciation, will provide \$50,000 in aftertax earnings and cash flow. As president of a publicly traded firm, you have security analysts constantly penciling in their projections of your earnings for the next quarter, and you fear your stock may drop dramatically if earnings are too low by even a small amount. Although Proposal A is superior, you may be more sensitive to aftertax earnings than to cash flow and you may therefore select Proposal B. Perhaps you are overly concerned about the short-term impact of a decision rather than the long-term economic benefits that might accrue.

You must be sensitive to executives' concessions to short-term pressures. Nevertheless in the material that follows, the emphasis is on the use of proper evaluation techniques to make the best economic choices and assure long-term wealth maximization.

Methods of Ranking Investment Proposals

In order to choose among competing capital projects, we must understand the methods commonly used to rank investment proposals. Let us consider two projects whose cash flows are presented as follows:

