Financial Theory and Corporate Policy (4th edition) by Copeland
Chapter 2: Investment Decisions: The Certainty Case

Fisher Separation

The Agency Problem

The Economic Definition of Profit

Problems for Managers Making Investment Decisions (FTCP 2, 1-5)

1. Searching out new opportunities in the market
2. Estimating expected cash flows of projects
3. Evaluating projects according to sound decision rules

Criteria for Essential Property of Maximizing Shareholder Value (FTCP 2, 1-5)

1. All cash flows should be considered
2. Cash flows should be discounted at the opportunity cost of funds
3. Select from mutually exclusive projects one that maximizes shareholders' wealth
4. Consider one project independently from others (value-additivity principle)

Widely Used Capital Budgeting Techniques (FTCP 2, 1-5)

1. Payback method

   Does not consider all cash or discount at opportunity cost of funds

2. Accounting rate of return (ARR)

   The ARR is the average after-tax profit divided by the initial cash outlay

   Uses accounting profits instead of cash flows and does not consider time value of money

3. Net present value (NPV)

   Present value of the free cash flows less the initial investment

   This is the only method consistent with shareholder maximization

4. Internal rate of return

   Should accept any project that has an IRR greater than the cost of capital

   Problems with IRR

   - Does not obey value-additivity principle
   - Assumes funds invested in projects have opportunity costs equal to the IRR for the project
   - Cash flows cannot be discounted at the market-determined cost of capital
   - Multiple roots can emerge if the sign of the cash flows change more than once

Cash Flows for Capital Budgeting Purposes (FTCP 2, 1-9)

Free operating cash flows minus taxes on free operating cash flows

$$\left(\Delta Rev - \Delta VC - \Delta FCC\right) - \tau_c\left(\Delta Rev - \Delta VC - \Delta FCC - \Delta dep\right) - \Delta I$$
$$= EBIT\left(1 - \tau_c\right) + \Delta dep - \Delta I$$

Cash flows are independent of the capital structure

$$WACC = K_b(1 - T_c)\left(\frac{B}{B+S}\right) + K_s\left(\frac{S}{B+S}\right)$$

Sources = Uses

Rev + New Equity = Dividends + Wages + Investments

Net Income = Rev − Wages − Depreciation

Dividends = Rev − Wages − Investment (no new equity)

ΔAssets = Investment − Depreciation

∴ Dividends = Net Income − Δ Assets