This study session covers the capital budgeting process with emphasis on its principles and investment decision criteria. Project evaluation through the use of spreadsheet modeling is presented. Other income and valuation model approaches are compared. The subject of capital structure is introduced with the classic Modigliani-Miller irrelevance theory, which proposes that capital structure decisions should have no effect on company value. Additional considerations of taxes, agency costs, and financial distress are introduced. The session concludes with discussion on dividend policies, factors affecting distribution or reinvestment, and dividend payout or share repurchase decisions.

**READING ASSIGNMENTS**

- **Reading 19**  
  Capital Budgeting  
  by John D. Stowe, PhD, CFA, and Jacques R. Gagné, FSA, CFA, CIPM

- **Reading 20**  
  Capital Structure  
  by Raj Aggarwal, PhD, CFA, Pamela Peterson Drake, PhD, CFA, Adam Kobor, PhD, CFA, and Gregory Noronha, PhD, CFA

- **Reading 21**  
  Analysis of Dividends and Share Repurchases  
  by Gregory Noronha, PhD, CFA, and George H. Troughton, PhD, CFA
LEARNING OUTCOMES

READING 19. CAPITAL BUDGETING

The candidate should be able to:

a calculate the yearly cash flows of expansion and replacement capital projects and evaluate how the choice of depreciation method affects those cash flows;
b explain how inflation affects capital budgeting analysis;
c evaluate capital projects and determine the optimal capital project in situations of 1) mutually exclusive projects with unequal lives, using either the least common multiple of lives approach or the equivalent annual annuity approach, and 2) capital rationing;
d explain how sensitivity analysis, scenario analysis, and Monte Carlo simulation can be used to assess the stand-alone risk of a capital project;
e explain and calculate the discount rate, based on market risk methods, to use in valuing a capital project;
f describe types of real options and evaluate a capital project using real options;
g describe common capital budgeting pitfalls;
h calculate and interpret accounting income and economic income in the context of capital budgeting;
i distinguish among the economic profit, residual income, and claims valuation models for capital budgeting and evaluate a capital project using each.

READING 20. CAPITAL STRUCTURE

The candidate should be able to:

a explain the Modigliani–Miller propositions regarding capital structure, including the effects of leverage, taxes, financial distress, agency costs, and asymmetric information on a company’s cost of equity, cost of capital, and optimal capital structure;
b describe target capital structure and explain why a company’s actual capital structure may fluctuate around its target;
c describe the role of debt ratings in capital structure policy;
d explain factors an analyst should consider in evaluating the effect of capital structure policy on valuation;
e describe international differences in the use of financial leverage, factors that explain these differences, and implications of these differences for investment analysis.

READING 21. ANALYSIS OF DIVIDENDS AND SHARE REPURCHASES

The candidate should be able to:

a describe the expected effect of regular cash dividends, extra dividends, liquidating dividends, stock dividends, stock splits, and reverse stock splits on shareholders’ wealth and a company’s financial ratios;
b compare theories of dividend policy and explain implications of each for share value given a description of a corporate dividend action;
c  describe types of information (signals) that dividend initiations, increases, decreases, and omissions may convey;
d  explain how clientele effects and agency costs may affect a company’s payout policy;
e  explain factors that affect dividend policy in practice;
f  calculate and interpret the effective tax rate on a given currency unit of corporate earnings under double taxation, dividend imputation, and split-rate tax systems;
g  compare stable dividend, constant dividend payout ratio, and residual dividend payout policies, and calculate the dividend under each policy;
h  compare share repurchase methods;
i  calculate and compare the effect of a share repurchase on earnings per share when 1) the repurchase is financed with the company’s surplus cash and 2) the company uses debt to finance the repurchase;
j  calculate the effect of a share repurchase on book value per share;
k  explain the choice between paying cash dividends and repurchasing shares;
l  describe broad trends in corporate payout policies;
m  calculate and interpret dividend coverage ratios based on 1) net income and 2) free cash flow;
n  identify characteristics of companies that may not be able to sustain their cash dividend.