Review Question 1

25. Assume that you are comparing two mutually exclusive projects. Which of the following statements is most correct?

a. The NPV and IRR rules will always lead to the same decision unless one or both of the projects are "non-normal" in the sense of having only one change of sign in the cash flow stream, i.e., one or more initial cash outflows (the investment) followed by a series of cash inflows.

b. If a conflict exists between the NPV and the IRR, the conflict can always be eliminated by dropping the IRR and replacing it with the MIRR.

c. There will be a meaningful (as opposed to irrelevant) conflict only if the projects' NPV profiles cross, and even then, only if the cost of capital is to the left of (or lower than) the discount rate at which the crossover occurs.

d. Statements a, b, and c are true.

Review Question 2

If debt financing is used, which of the following is CORRECT?

a. The percentage change in net operating income will be equal to a given percentage change in net income.

b. The percentage change in net income relative to the percentage change in net operating income will depend on the interest rate charged on debt.

c. The percentage change in net income will be greater than the percentage change in net operating income.

d. The percentage change in sales will be greater than the percentage change in EBIT, which in turn will be greater than the percentage change in net income.

e. The percentage change in net operating income will be greater than a given percentage change in net income.

Review Question 3

Which of the following statements is CORRECT, holding other things constant?

a. An increase in the personal tax rate is likely to increase the debt ratio of the average corporation.

b. If changes in the bankruptcy code make bankruptcy less costly to corporations, then this would likely reduce the debt ratio of the average corporation.

c. Firms whose assets are relatively liquid tend to have relatively low bankruptcy costs, hence they tend to use relatively little debt.

d. An increase in the corporate tax rate is likely to encourage a company to use more debt in its capital structure.

Review Question 4

Bailey and Sons has a levered beta of 1.10, its capital structure consists of 40% debt and 60% equity, and its tax rate is 40%. What would Bailey's beta be if it used no debt, i.e., what is its unlevered beta?

a. 0.64
b. 0.67
c. 0.71
d. 0.75
e. 0.79

Review Question 5

Which of the following statements is CORRECT?

a. If the cost of capital declines, this lowers a project's NPV.

b. The NPV method is regarded by most academics as being the best indicator of a project's profitability; hence, most academics recommend that firms use only this one method.

c. A project's NPV depends on the total amount of cash flows the project produces, but because the cash flows are discounted at the WACC, it does not matter if the cash flows occur early or late in the project's life.

d. The NPV and IRR methods may give different recommendations regarding which of two mutually exclusive projects should be accepted, but they always give the same recommendation regarding the acceptability of a normal, independent project.

e. The NPV method was once the favorite of academics and business executives, but today most authorities regard the MIRR as being the best indicator of a project's profitability.

Review Question 6

Which of the following statements is CORRECT?

a. The IRR method can never be subject to the multiple IRR problem, while the MIRR method can be.

b. One reason some people prefer the MIRR to the regular IRR is that the MIRR is based on a generally more reasonable reinvestment rate assumption.

c. The higher the WACC, the shorter the discounted payback period.

d. The MIRR method assumes that cash flows are reinvested at the crossover rate.

e. The MIRR and NPV decision criteria can never conflict.

Review Question 7

Corner Jewelers, Inc. recently analyzed the project whose cash flows are shown below. However, before the company decided to accept or reject the project, the Federal Reserve changed interest rates and therefore the firm's WACC. The Fed's action did not affect the forecasted cash flows. By how much did the change in the WACC affect the project's forecasted NPV? Note that a project's expected NPV can be negative, in which case it should be rejected.

Old WACC: 8.00%	New WACC: 11.25%			
Year	0	1	2	3
Cash flows	-$1,000	$410	$410	$410

a. -$59.03
b. -$56.08
c. -$53.27
d. -$50.61
e. -$48.08

Review Question 8

Which of the following does NOT always increase a company's market value?

a. Increasing the expected operating profitability (NOPAT/Sales).
b. Decreasing the capital requirements (Capital/Sales).
c. Decreasing the weighted average cost of capital.
d. Increasing the expected rate of return on invested capital.
e. Increasing the expected growth rate of sales.

Review Question 9

. Daniel Sawyer, the CEO of the Sawyer Group, is initiating planning for the company's operations next year, and he wants you to forecast the firm's additional funds needed (AFN). The firm is operating at full capacity. Data for use in your forecast are shown below. Based on the AFN equation, what is the AFN for the coming year? Dollars are in millions.

Last year's sales = S0	$350	Last year's accounts payable	$40
Sales growth rate = g	30%	Last year's notes payable	$50
Last year's total assets = A0*	$500	Last year's accruals	$30
Last year's profit margin = PM	5%	Target payout ratio	60%

a. $102.8
b. $108.2
c. $113.9
d. $119.9
e. $125.9

Review Question 10

. Which of the following statements is CORRECT? Assume a company's target capital structure is 50% debt and 50% common equity.

a. The WACC is calculated on a before-tax basis.
b. The WACC exceeds the cost of equity.
c. The cost of equity is always equal to or greater than the cost of debt.
d. The cost of retained earnings typically exceeds the cost of new common stock.
e. The interest rate used to calculate the WACC is the average after-tax cost of all the company's outstanding debt as shown on its balance sheet.

Review Question 11

The Anderson Company has equal amounts of low-risk, average-risk, and high-risk projects. The firm's overall WACC is 12%. The CFO believes that this is the correct WACC for the company's average-risk projects, but that a lower rate should be used for lower-risk projects and a higher rate for higher-risk projects. The CEO disagrees, on the grounds that even though projects have different risks, the WACC used to evaluate each project should be the same because the company obtains capital for all projects from the same sources. If the CEO's position is accepted, what is likely to happen over time?

a. The company will take on too many low-risk projects and reject too many high-risk projects.

b. Things will generally even out over time, and, therefore, the firm's risk should remain constant over time.

c. The company's overall WACC should decrease over time because its stock price should be increasing.

d. The CEO's recommendation would maximize the firm's intrinsic value.

e. The company will take on too many high-risk projects and reject too many low-risk projects.

HW Q7

7. Which of the following statements is most correct?

a. Since debt financing raises the firm's financial risk, raising a company's debt ratio will always increase the company's WACC.

b. Since debt financing is cheaper than equity financing, raising a company's debt ratio will always reduce the company's WACC.

c. Increasing a company's debt ratio will typically reduce the marginal cost of both debt and equity financing; however, it still may raise the company's WACC.

d. Statements a and c are correct.

e. None of the statements above is correct.

HW Q9

9. Dabney Electronics currently has no debt. Its operating income is \$20 million and its tax rate is 40 percent. It pays out all of its net income as dividends and has a zero growth rate. The current stock price is \$40 per share, and it has 2.5 million shares of stock outstanding. If it moves to a capital structure that has 40 percent debt and 60 percent equity (based on market values), its investment bankers believe its weighted average cost of capital would be 10 percent. What would its stock price be if it changes to the new capital structure?

a. \$40
b. \$48
c. \$52
d. \$54
e. \$60

HW Q35

- 35. Capitol City Transfer Company is considering building a new terminal in Salt Lake City. If the company goes ahead with the project, it must spend \$1 million immediately (at t = 0) and another \$1 million at the end of Year 1 (t = 1). It will then receive net cash flows of \$0.5 million at the end of Years 2 - 5, and it expects to sell the property and net \$1 million at the end of Year 6. All cash inflows and outflows are after taxes. The company's cost of capital is 12 percent, and it uses the modified IRR criterion for capital budgeting decisions. What is the project's modified IRR (MIRR)?
- a. 11.9%
- b. 12.0%
- c. 11.4%
- d. 11.5%
- e. 11.7%