

- 9-13.** Amy Jolly is the treasurer of her company. She expects the company will grow at 4 percent in the future, and debt securities (YTM = 14%, tax rate = 30%) will always be a cheaper option to finance the growth. The current market price per share of its common stock is \$39, and the expected dividend in one year is \$1.50 per share. Calculate the cost of the company's retained earnings and check if Amy's assumption is correct.

Cost of Equity
CAPM Approach

- 9-16.** Margo Channing, the financial analyst for Eve's Broadway Production Company, has been asked by management to estimate a cost of equity for use in the analysis of a project under consideration. In the past, dividends declared and paid have been very sporadic. Because of this, Ms. Channing elects to use the CAPM approach to estimate the cost of equity. The rate on the short-term U.S. Treasury bills is 3 percent, and the expected rate of return on the overall stock market is 11 percent. Eve's Broadway Production Company has a beta of 1.6. What will Ms. Channing report as the cost of equity?

- 9-19.** A company has an optimal capital structure as follows:

Total Assets	\$600,000
Debt	\$300,000
Preferred Stock	\$100,000
Common Equity	\$200,000

**Weighted
Average Cost
of Capital**

What would be the minimum expected return from a new capital investment project to satisfy the suppliers of the capital? Assume the applicable tax rate is 40 percent, YTM of its debt is 11 percent, flotation cost per share of preferred stock is \$0.75, and flotation cost per share of common stock is \$4. The preferred and common stocks are selling in the market for \$26 and \$143 a share, respectively, and they are expected to pay a dividend of \$2 and \$7, respectively, in one year. The company's dividends are expected to grow at 13 percent per year. The firm would like to maintain the foregoing optimal capital structure to finance the new project.

Payback, NPV, and IRR

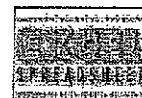
10-11. Dave Hirsh publishes his own manuscripts and is unsure which of two new printers he should purchase. He is a novelist living in Parkman, Illinois. Having slept through most of his Finance 300 course in college, he is unfamiliar with cash flow analysis. He enlists the help of the finance professor at the local university, Dr. Gwen French, to assist him. Together they estimate the following expected initial investment (a negative cash flow) and net positive cash flows for years 1 through 3 for each machine. Dave only needs one printer and estimates it will be worthless after three years of heavy use. Dave's required rate of return for this project is 10 percent.

Year	Expected Net Cash Flow	
	Cal's Project	Aron's Project
0	\$(2,000)	\$(2,500)
1	900	1,500
2	1,100	1,300
3	1,300	800

- a. Calculate the payback period for each printer.
- b. Calculate the net present value for each printer.
- c. Calculate the internal rate of return for each printer.
- d. Which printer do you think Dr. French will recommend? Why?
- e. Suppose Dave's required rate of return were 16 percent. Does the decision about which printer to purchase change?

12-7. A corporate bond has a face value of \$1,000 and an annual coupon interest rate of 7 percent. Interest is paid annually. Of the original 20 years to maturity, only 10 years of the life of the bond remain. The current market price of the bond is \$872. To the nearest whole percent, what is the YTM of the bond today?

Bond YTM



Common Stock
Valuation per Share

- 12-13. Golden Manufacturing Company is expected to pay a dividend of \$8 per share of common stock in one year. The dollar amount of the dividends is expected to grow at a constant 3 percent per year in future years. The required rate of return from shares of similar common stock in the present environment is 14 percent.
- What would you expect the current market price of a share of Golden common stock to be?
 - Assuming the cash dividend amount and the growth rate are accurate, what is the annual rate of return on your investment in Golden common stock if you purchased shares at the stock's actual listed price of \$65 per share?

- 12-20. Regis knows that CRS stock sells for \$82 per share, has a growth rate of 7 percent, and a dividend that was just paid of \$3.82. What can Regis expect as an annual percent yield if he purchases a share of CRS stock?

Common Stock
Yield

Answers

- 9-13 7.85%
9-16 15.80%
9-19 10.632%
10-11a 2 years & 1.77 years which can be rounded to 2 years
10-11b \$703.98, \$539.07
10-11c 27.82% & 23.25%
10-11d Cal
10-11e \$426.20 & \$271.74
12-7 9%
12-13 (a) \$72.73 and (b) 15.31%
12-20 11.98%