

BUSI 2743 – PRINCIPLES OF FINANCE

Chapter 7 Problems

1. **Preferred Dividends.** In each case in the following table, how many dollars of preferred dividends per share must be paid to preferred stockholders in the current period before common stock dividends are paid?

Case	Type	Par Value	Dividend per share per period	Periods of dividends passed
A	Cumulative	100	\$5	3
B	Noncumulative	120	3%	2
C	Noncumulative	100	\$4	1
D	Cumulative	80	1.5%	4
E	Cumulative	60	3%	0

2. **Preferred Stock Valuation.** RSR Inc. has an outstanding preferred stock issue with a par value of \$75 per share. The preferred shares pay dividends annually at a rate of 10 percent.
- What is the annual dividend on RSR preferred stock?
 - If investors require a return of 8% on this stock and the next dividend is payable one year from now, what is the price of RSR preferred stock?
 - Suppose that RSR has not paid dividends on its preferred shares in the last 3 years, but investors believe that it will start paying dividends again in one year. What is the value of RSR preferred stock if it is cumulative and if investors require an 8 percent rate of return?
3. **Common Stock Value: Constant Growth.** ABC Company has paid dividends as shown over the past 6 years:

Year	Dividend per share
2018	2.68
2017	2.53
2016	2.38
2015	2.25
2014	2.12
2013	2.00

ABC's 2019 dividend is expected to be \$2.84.

- If you can earn 14 percent on similar-risk investments, what is the most you would be willing to pay per share?
- If you can earn only 9 percent on similar-risk investments, what is the most you would be willing to pay per share?
- Compare and contrast your findings in parts a and b, and discuss the impact of changing risk on share value.

- 4. Common Stock Value: Variable Growth.** Hospitality Bakery's most recent annual dividend was \$2.00 per share ($D_0 = 2.00$), and the firm's required rate of return is 12 percent. Find the market value of Hospitality Bakery's shares when:
- Dividends are expected to grow at 9 percent annually for 3 years, followed by a 6 percent annual growth rate in years 4 on.
 - Dividends are expected to grow at 9 percent annually for 3 years, followed by a zero percent annual growth rate in years 4 on.
 - Dividends are expected to grow at 9 percent annually for 3 years, followed by a 10 percent annual growth rate in years 4 on.
- 5. Free Cash Flow Valuation.** Longview Industries is considering going public, but is unsure of a fair offering price for the company. Before hiring an investment banker to assist in making the public offering, managers at LI have decided to make their own estimate of the firm's common stock value. The firm's CFO has gathered data for performing the valuation using the free cash flow valuation model.

LI's weighted average cost of capital is 12 percent, and it has \$2,000,000 of debt at market value and \$500,000 of preferred stock at its assumed market value. The estimated free cash flows over the next 5 years are given below. From year 5 on, the firm expects its free cash flow to grow by 4 percent annually.

Year (t)	Free Cash Flow (FCF_t)
1	250,000
2	275,000
3	300,000
4	330,000
5	350,000

- Estimate the value of LI (the entire company) by using the free cash flow valuation model.
 - Use your findings in part a, along with the data provided above, to find LI's common stock value.
 - If LI plans to issue 250,000 shares of common stock, what is its estimated value per share?
- 6. Valuation with Price/Earnings Multiples.** For each of the firms below, use the data given to estimate its common stock value employing price/earnings (P/E) multiples.

Firm	Expected EPS	P/E Multiple
A	4.00	7.5
B	5.00	10.0
C	2.00	12.5
D	2.50	9.1
E	5.25	16.0